

4/23/87

TO: Dave, Steve, Brian, Chris, Joel, Mike, Gabby

FROM: Jon

1. We shall have an all-day meeting on Wednesday, April 29, to discuss Infocom's direction.

2. With Chris's help, I will try to distribute a brief agenda before then. Feel free to give us your suggestions. (We shall feel free to tell you what we think of your suggestions.)

3. The location of the meeting is still undecided, but it will NOT be here at the office. The Hideaway Pub is booked, and our credit is no longer any good at the Golden Banana. So we'll be at someone's home. That someone will probably be one of us.

4. Needless to say ... well, I needn't say it.

5. Don't get a swelled head just because you were invited. After all, look who else was invited.

SOME POSSIBLE TOPICS FOR DISCUSSION:

- Where is the market going? (Where has it gone?)
- How many eggs in the I.F. basket?
- What do we do about I.F.?
 - Change collaborator philosophy? ("Name" authors? Licenses?)
 - Outside developers vs. inside developers
 - Genres we haven't tapped into?
 - Any other technological enhancements we should be doing?
 - Proper mix of small changes, big changes, no changes
- Non-I.F.
 - Do we do non-I.F. in-house or outside?
 - How do we go about judging outside possibilities?

Long-range Planning Meeting
Jon's house, 4/29/87

STEVE

TYPES OF COMPUTER GAMES

(1)

ARCADE GAMES

(FAMILY GAMES ESSENTIALLY HIGH END ARCADE GAMES)

SPORTS GAMES

SIMULATORS

ROLE PLAYING GAMES (WIZARDRY, ULTIMA, ...)

WAR STRATEGY (SSI) (THESE ARE OFTEN SIMULATORS)

INT. FICTION

BOARD GAMES (SHANGHAI)

MISC (UNUSUAL STUFF LIKE LITTLE COMPUTER PEOPLE AFTER 600)

LAST NEW CATEGORY THAT WAS SUCCESSFUL WAS SIMULATIONS -
SEVERAL YEARS AGO

SPORTS GAMES, ALTHOUGH ODDER, ARE RECENTLY IMPAIRED
DRAMATICALLY BY BECOMING SIMULATIONS

DAVE - "MISSING DEMOGRAPHIC" (RELATING TO MULTI-PLAYER GAMES)

- "THE KID WHO WOULD STAY HOME & READ RATHER THAN PLAY
BASEBALL"

JEN + JOEL - PUPPLE PROSE + STORY LOVERS.

WHAT HAPPENS NEXT? - BREAKOUT - STAR PILL ACE - WHAT NEXT, WHO'S?

- ROGUE - WHAT MONSTER NEXT?, WHAT

COULD WE CUT BACK ON AMOUNT OF PUZZLES + PUPPLE PROSE, CUT EFFORT

PUT INTO EACH TITLE + CUT PRICE TO \$15? JON + DAVE DON'T THINK
SO.

②

GAB - WHAT DO PEOPLE MEAN WHEN THEY PRIZE RICHNESS? GRANULARITY, UNDERSTANDING INPUT, AND HANDLING LOTS OF STRANGE CASES.

MASS MARKET - IS THERE SOMETHING IF-LIKE THAT WOULD BE A MASS MARKET PRODUCT

THE READING IS WHAT MAKES IT NON-MASS MARKET

STEVE - TIME COMMITMENT MORE OF A BARRIER THAN READING OR PRICE.

JOLL - 'MATH SUBJECT' - FUNDAMENTAL PROBLEM - CATEGORIES DIE OUT UNTIL SOMEONE COMES ALONG & REVITALIZES. WE'RE BASICALLY ALONE IN OUR CATEGORY.

DAVE - WHAT WOULD REVITALIZE IF.? WHAT PRODUCTS COULD WE DO RIGHT NOW TO SELL HERE? WHAT ~~WE~~ SHOULD TRIP HAWKINS DO TO KNOCK US OUT?

TRIP - DO WHAT WE DO BETTER, CHEAPER. GO AFTER OUR CORE.

- EXPAND BEYOND BY GRAPHICS, SOUND, ...

^{DAVE}
^{EVAN} QUICK DO IF. ON NINTENDO WITH LABYRINTH-LIKE INTERFACE.
I'D GET RID OF TEXT COMPLETELY & DO KING'S QUEST-TYPE INTERFACE

MARKET COULD BE -

JOLL - PEOPLE WHO OWN COMPUTERS + READ BOOKS

(3)

WANTS ON-LINE TO STOP PEOPLE FROM GETTING STUCK.

JOHN - IS IT PUZZLES OR COMMUNICATION PROBLEMS?

DAVE - WE SHOULD HANDLE THE SORTS OF THINGS NEW PEOPLE TYPE
IN AT THE BEGINNING ^{OF THEIR FIRST GAME.} TEACH THEM HOW.

GAB -

DAVE - NOTHING DULLER LOOKING THAN AN INFOCOM GAME SCREEN,

ME - WE'RE NOT TECHNICALLY AHEAD OF THE PACK ANYMORE.

YETIS AND WE WERE IN A CLASS BY OURSELVES.

DAVE - ^{WE} SHOULD MAKE ANY EFFORT NECESSARY TO FULLY IMPLEMENT THE
XZIP SPEC.

ME - ~~TOO~~ WHAT'S WRONG WITH LEARNING FROM OTHERS' IMPROVEMENTS?

TAKE INCREMENTAL STEPS

WEST COAST WOULD MOVE FASTER ON SOUND IF A GAME WERE
IN MIND.

WHAT GAMES COMING UP COULD USE SOUND?

DAVE - WE ALWAYS RUN OUT OF SPACE. CAN WE PRODUCE A GAME
SYSTEM WHICH DOESN'T HAVE LIMITATIONS ON SIZE, TABLES, ...

DAVE - AS WE SWITCH TO DEVELOPING GAMES ON MICRO8, MIGHT WE SHOULD USE MU RATHER THAN ZIT?

JEN - WHAT'S MORE IMPORTANT IS - WHAT KINDS OF GAMES DO WE WANT TO DO IN THE FUTURE?

WHAT IS THE RIGHT MIX OF STORY VS PUZZLES (ANFV IS ZORK)?

SON - ONE REASON FOR ZORK'S POPULARITY IS IT'S ACCESSABILITY, NO DOCUMENTATION,

DAVE - CURIOSITY - WHAT HAPPENS IF I...? IS THE MOST IMPORTANT ASPECT OF OUR GAMES. (BRIAN - THAT'S WHAT'S WRONG WITH PORTAL)

DAVE - THIS IS ALSO WHAT MAKES RPG ATTRACTIVE

JOEL - CAN YOU CREATE SATISFYING PUZZLES WHICH DON'T REALLY REQUIRE SKILL TO SOLVE? ? TROLL FIGHTING IN ZORK - (BEYOND ZORK IS FULL OF THIS)

ANFV DISCUSSION - JOEL FOUND RATIO OF PURPLE PROSE TO GEOGRAPHY LOW. DAVE LOOKED AT LORD & NOTICED LOTS OF TEXT HE'D NEVER SEEN. ~~THE~~ THOSE WHO PLAY THESE SOLVE PUZZLES AND THINK THEY'VE SEEN MOST OF GAME. THIS WAS DIFFERENT - REALLY MUCH MORE AN EXPERIMENT THAN A PUZZLE-SOLVING GAME.

NEW TECHNOLOGY - MASS MARKET NON-KEYBOARD I.F.?

EASY INTERACTION, SIMPLE INPUT DEVICE

WE'RE TRYING WITH PAPER TO MAKE

ME. WHAT ABOUT VOICE RECOGNITION? - DAVE, JOE, CHRIS - TOO FAR IN FUTURE, TOO EXPENSIVE, TOO LIMITED

DAVE - BUT WE COULD DO A GREAT DEMO.

BRIAN - ~~WAS AIR INPUT~~ POINTER-CLICKER I.F. INTERFACE DOESN'T NECESSARILY MEAN LOWER SOPHISTICATION. THE CHALLENGE IS IN PROGRAMMING, AND CREATING DIFFERENT KINDS OF PUZZLES WHICH WORK WITH POINT & CLICK. (SOME THINGS ARE MUCH EASIER WITH POINT & CLICK - SHANGHAI FOR INSTANCE)

JOEL - WE SHOULDN'T WAIT FOR CDI TO DO SOMETHING DIFFERENT. WHY CAN'T A ~~E~~ DIFFERENT INTERACTION BE USED ON COMPUTERS TOO?

JOEL - RABBIT SYSTEMS IS PROPOSING A \$79.95 HAND-HELD INFOCOM GAME-PLAYING MACHINE.

CHRIS - STEVE & BRIAN ARE BECOMING AVAILABLE. WHAT SHOULD THEY DO NEXT? SHOULD BRIAN DO A POINT & CLICK GAME?

DISCUSSION OF INT. STORYTELLING. IS IT TOO RESTRICTIVE? DAVE & STEVE FEAR THAT WE DO SOPHISTICATED ENTERTAINMENT. SHANGHAI OR ERECTOR SET WOULD BE PRODUCTS THEY'D BE COMFORTABLE WITH.

JOE, MIKE, & JOEL FEEL WE SHOULD LIMIT TO A WIDE ENOUGH

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CAREFULLY THAT WE HAVE ROOM FOR GROWTH BUT NARROW ENOUGH TO HAVE A CLEAR MARKET POSITION & BE KNOWN BY CONSUMERS AS SPECIALISTS IN AN AREA.

- DAVE FEELS WE ~~SHOULD DO ANY KIND OF PARSING~~ ARE THE ENGLISH PARSING EXPERTS & SHOULD DO ANY KIND OF PARSING
- PEOPLE CAN LIVE WITH INTERACTIVE STORYTELLING IF WE INTERPRET IT BROADLY.

WHAT MIX OF PRODUCTS?

- MIKE - $\sim 1/3$ EXPERIMENTAL, $1/3^+$ TRADITIONAL WITH ENHANCEMENTS, $1/3$ - COLLABORATIONS WITH PEOPLE WHO BRING A NEW AUDIENCE
- JOEL - LEVEL OF EXPERIMENT - WE SHOULD TRY FOR ONE OR TWO VERY EXPERIMENTAL PRODUCTS (e.g. NEW ~~AND~~ INTERFACE, TOM SWYDER'S TECH COMICS, ETC.)
- JOEL - WHAT COMICS DID PEOPLE READ WHEN THEY WERE YOUNGER?

STEVE, DAVE - SUPERMAN, DISNEY, MAD

MIKE - DC

GARY - ARCHIE, COMEDY

JON - BOUGHT ARCHIE, READ SOME DC + MARVEL

WE'D LIKE TO LICENSE SOMETHING FOR

IDEA

- LITTLE COMPUTER PEOPLE - SADISTIC VERSION - MR. BILL - BURN HOUSE. DROWN HIM IN BATHTUB. ... "OH, NO. IT'S MR. KEYBOARD."

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ANOTHER GAME IDEA - SECTIONS WITH NUNS, DEAD BABIES,
FATHER'S DAUGHTER - STANDARD JOKE FAIR
(MEETING DEGENERATES)

NOW ARETS-

- SERIOUS XXX POOR GAME - DON'T PUT OUR NAME ON IT
WESTERN?, SPY?, A REAL MYSTERY? (FEELING THAT WE NEED MUCH IMPROVEMENT)
PARSER AND FAMOUS COLLABORATOR

PARODIES? (LIKE BORNE OF THE RINGS)

HISTORICAL NON-FICTION?

SIDNEY SHERIDON
SCHLOCK (JUDITH KRANTZ, HOLLYWOOD STARS, ...)

COLLABORATING WITH ILLUSTRATORS - FRAZZETA, SEUSS, LARSON, ...
GORM, TRUDEAU, PFEIFFER, BLOIS,

JON - CARL & ELIZABETH THINK GAMES WITH CHAPTERS HAVE MORE
APPEAL BECAUSE OF NATURAL BREAKPOINTS. BUREAUCRACY HAS
A BIT OF THIS, SO DOES AMFU. (EXCEPT YOU CAN'T DO
ONE OF THESE 'CHAPTERS' IN A SITTING) WHAT DO PEOPLE
THINK? STEVE - MAKES IT MORE LINEAR. PREFER JEFF'S SHORT
STORIES.

JON - INSTEAD OF '2"s, YOU COULD
HAVE CHAPTER 1 END AS YOU BOARD THE SHUTTLE, CHAPTER
2 BEGIN AS YOU WERE DOCKING AT SPACE STATION.
NO BORING CONNECTING SEQUENCES.

INSIDE VS. OUTSIDE DEVELOPMENT - HOW DO WE SET THIS
IN FUTURE?

- AN ADVANTAGE TO ~~THE~~ NEW DEVEL. SYSTEM ON MAR 2'S IS LETTING OUTSIDERS USE IT + GETTING RIGHT OF FIRST REFUSAL ON ANY PRODUCTS DEVELOPED (AS E.A. DOES).

JON - HOW EVALUATE + JUDGE OUTSIDE SUBMISSIONS - DISCUSSION (MUST BE CAREFUL ABOUT HOW WE DO IT AND WHO SEES. THERE IS RISK OF BEING SUED IF WE DO SOMETHING SIMILAR IN FUTURE)

DAVE - WHATEVER HAPPENED TO CONCEPT OF HAVING A GAME IN THE CAN (WE MAY LATER THIS YEAR).

CHRIS - WITH HUGO, + RESTAURANT + BUREAUCRACY, WE ESSENTIALLY BOUGHT A TITLE/NAME RATHER THAN TALENT.

SHOULD WE DO MORE?

LORE OF THE RINGS, STAR TREK?

PROBABLY NOT STEVEN KING.

STEVE - WORKS BETTER TO LICENSE A UNIVERSE, NOT JUST ONE WORK.

SOFTSEL HOT LIST

This Week	Last Week	Weeks on Chart	RECREATION
1	1	99	Flight Simulator II - Sublogic - AT, C64, AP
2	2	95	Flight Simulator - Microsoft - IBM
3	3	51	Sargon III - Hayden Software - AP, C64, IBM, MAC
4	4	115	Zork I - Infocom - CP/M, AP, DEC, IBM, AT, MAC, TIP
5	5	115	Wizardry - Sir-Tech - IBM, AP
6	6	52	Ultima III - Origin Systems - AP, AT, IBM, C64
7	23	2	Hitchhiker's Guide to the Galaxy - Infocom - MAC, AT, C64, IBM, AP
8	10	6	Triviala Fever - Professional Software - C64, AP, IBM, PCjr
9	8	57	Millionaire - Bluechip Software - MAC, AP, C64, IBM, AT
10	14	11	Zork II - Infocom - TRS, IBM, AP, AT, CP/M, TIP, MAC
11	7	100	Frogger - Sierra On-Line - IBM, AT, AP, C64, MAC
12	—	6	Championship Lode Runner - Broderbund - AP, C64
13	11	5	Cutthroats - Infocom - IBM, AP, MAC, AT
14	15	113	Deadline - Infocom - DEC, IBM, TRS, AT, C64, CP/M, MAC, AP
15	24	32	Sorcerer - Infocom - C64, MAC, TRS, AT, IBM, AP
16	9	28	Summer Games - Epyx - AP, C64, AT
17	12	23	Beyond Castle Wolfenstein - Muse Company - C64, APC
18	22	26	Transylvania - Penguin Software - AP, C64, MAC
19	13	68	Lode Runner - Broderbund - AT, C64, IBM, AP
20	18	93	Zork III - Infocom - IBM, AP, TRS, MAC, DEC, AT, CP/M, TIP, C64
21	19	80	Zaxxon - Datasoft - AP
22	17	2	Pitstop II - Epyx - C64
23	16	15	Murder by the Dozen - CBS Software - C64, MAC, IBM, AP
24	21	11	Bruce Lee - Datasoft - C64, AP, AT
25	25	78	Ultima II - Sierra On-Line - C64, AT, IBM, AP, PCjr
26	27	21	Seastalker - Infocom - MAC, C64, IBM, AP, AT
27	20	49	Enchanter - Infocom - TRS, TIP, AT, IBM, DEC, AP, C64
28	28	3	Gato - Spectrum Holobyte - IBM, PCjr
29	30	45	Witness - Infocom - AT, DEC, C64, AP, MAC, IBM, TRS, TIP
30	29	37	Planetfall - Infocom - TRS, MAC, IBM, CP/M, AP, DEC, AT, C64

This Week	Last Week	Weeks on Chart	HOME
1	1	62	Dollars & Sense - Monogram - TIP, MAC, APC, IBM, AP
2	2	21	Print Shop - Broderbund - AP
3	3	99	Bank Street Writer - Broderbund - AP, APC, IBM, C64, AT
4	5	15	Managing Your Money - Micro Education (MECA) - IBM
5	4	114	Home A/C - Arrays/Cont. - AP, TIP, EPS, AT, C64, IBM, TRS, AP
6	6	18	Mac the Knife - Miles Computing - MAC
7	9	2	Dazzle Draw - Broderbund - APC
8	13	24	ClickArt - T/Maker - MAC
9	8	55	Homeward - Sierra On-Line - C64, AP, AT, IBM, TIP
10	12	35	Micro Cookbook - Virtual Combinatics - APC, APC, IBM, AP
11	14	32	Bank Street Speller - Broderbund - AP
12	11	9	Your Pers. Net Worth - Scarborough - AP, C64, AT, IBM, PCjr
13	10	38	Paperclip Word Processor - Batteries Included - C64
14	15	77	S.A.M. - Tronix Publishing - AP, AT, C64
15	—	1	Print Shop Graphics Library - Broderbund - AP

This Week	Last Week	Weeks on Chart	EDUCATION
1	1	110	Mastertype - Scarborough System - AP, AT, C64, IBM
2	2	55	Math Blaster - Davidson & Assoc. - IBM, C64, AP, APC, PCjr
3	4	6	Mind Probe - Human Edge - AP, C64, MAC, APC, IBM, PCjr
4	3	14	Typing Tutor III - Simon & Schuster - AP, C64, IBM
5	5	28	Study Program for the S.A.T. - Barrons - C64, AP, IBM, PCjr
6	8	89	Facemaker - Spinnaker - C64, AT, AP, IBM, PCjr
7	7	43	Word Attack - Davidson & Assoc. - IBM, AP, C64, APC, APC, PCjr
8	9	41	E. G. for Young Children - Springfield - IBM, AT, AP, C64
9	10	17	Rocky's Boots - The Learning Company - C64, AP
10	—	1	Spell It! - Davidson & Assoc. - AP, C64
11	14	99	Typing Tutor II - Microsoft - AP
12	12	35	Speed Reader II - Davidson & Assoc. - C64, IBM, AP
13	15	34	Algebra 1 - EduWare - AP, IBM
14	13	43	Mastering the S.A.T. - CBS Software - AP, IBM, C64
15	—	4	Cdex How to Use the IBM PC - Cdex - IBM

This Week	Last Week	Weeks on Chart	BUSINESS
1	1	94	1-2-3 - Lotus - IBM, TIP, WNG, PCjr, DEC, VTR
2	2	115	PFS:File - Software Pub. - APC, AP, DEC, IBM, TIP, MAC, C64
3	3	109	Multiplan - Microsoft - AP, CP/M, MAC, IBM
4	5	20	Symphony - Lotus - IBM
5	4	71	PFS:Write - Software Publishing - APC, IBM
6	18	5	Sidekick - Borland Intl. - IBM, PCjr
7	8	71	Multimate - Multimate Intl. - TIP, IBM
8	6	114	PFS:Report - Software Pub. - APC, APC, IBM, MAC, TIP, AP, DEC
9	9	21	dBase III - Ashton-Tate - IBM
10	11	13	Filevision - Telos Software - MAC
11	7	113	Wordstar - Micropro - CP/M, IBM, AP, TIP, PCjr, DEC
12	12	31	ThinkTank - Living Videotext - APC, MAC, IBM, AP
13	10	11	Chart - Microsoft - MAC, IBM
14	16	48	RtBase 4000 - Micromin - IBM, VTR, TIP, DEC
15	14	18	1-2-3 to Symphony - Lotus - IBM
16	13	53	Microsoft Word - Microsoft - IBM
17	17	113	dBase II - Ashton-Tate - DEC, IBM, AP, EPS, CP/M, TIP
18	15	113	PFS:Graph - Software Publishing - AP, TIP, IBM, APC
19	23	31	Word Perfect - Satellite Software - IBM, TIP, DEC
20	20	15	PFS:File & Report (Bundled) - Software Pub. - MAC
21	26	21	Microsoft Project - Microsoft - IBM
22	19	99	DB Master - Stoneware - AP, IBM, MAC, APC
23	24	4	Flashcalc - Visicorp - AP, IBM
24	25	15	Framework - Ashton-Tate - IBM
25	21	27	Volkswriter Deluxe - Lifetime Software - IBM, TIP
26	28	19	dBase Upgrade Kit - Ashton-Tate - IBM
27	22	53	Multipan - Hewlett - C64
28	27	17	Megamerge - Megahaus - IBM, AP, MAC
29	29	19	Rtbase Clout - Micromin - IBM
30	—	10	Harvard Project Manager - Harvard Software - IBM

This Week	Last Week	Weeks on Chart	BOOKS
1	1	7	Invisclues - Infocom
2	2	45	Using 1-2-3 - Que
3	—	1	Book of Apple Software 1985 - Arrays/Book Company
4	3	8	Mastering Symphony - Sybex
5	8	5	Book of Adventure - Arrays/Book Company
6	4	41	Wordstar Made Easy - Osborne McGraw-Hill
7	5	89	Apple II User's Guide - Osborne McGraw-Hill
8	9	9	Beneath Apple Pro DOS - Quality Software
9	6	15	Running MS-DOS - Microsoft
10	—	3	Using Symphony - Que

This Week	Last Week	Weeks on Chart	HARDWARE & ACCESSORIES
1	1	47	Six Pak Plus - AST Research - IBM
2	2	57	Hercules Graphic Card - Hercules - IBM
3	6	5	Hercules Color Card - Hercules - IBM
4	3	62	Smartmodem 1200B - Hayes - IBM
5	4	80	Smartmodem 1200 - Hayes
6	5	14	Datallife MD550 Diskette - Verbatim
7	7	115	System Saver - Kensington Microwave Ltd. - AP
8	10	34	Lemon - Electronic Protection Device
9	—	12	MD-2 5 1/4" Diskette - Maxell
10	—	26	Koala Pad - Koala - C64, AT, AP, PCjr, IBM

This Week	Last Week	Weeks on Chart	SYSTEMS & UTILITIES
1	1	59	Crosstalk - Microstuf - AP, TIP, IBM, CP/M, PCjr
2	2	32	Slideways - Funk Software - IBM, AP
3	3	70	Norton Utilities - Peter Norton Computing - IBM
4	6	2	Turbo Pascal - Borland Intl. - CP/M, AP, IBM, PCjr
5	—	1	PC Mouse/PC Paint Bundle - Mouse Systems - IBM
6	—	28	Prokey - Rosesoft - IBM
7	8	3	Moviemaker - Prentice-Hall - IBM
8	4	38	Basic Interpreter - Microsoft - MAC, CP/M, IBM

LEGEND: **AP** = Apple, **APC** = Apple IIc, **APe** = Apple IIe, **AT** = Atari, **C64** = Commodore 64, **COM** = Commodore PET/IBM, **CP/M** = 5 1/4" and 8" formats, **DEC** = DEC Rainbow, **EPS** = Epson QX-10, **IBM** = IBM PC, **MAC** = Apple Macintosh, **PCjr** = IBM PCjr, **TIP** = Texas Instruments Professional, **TRS** = TRS-80, **VIC** = Commodore VIC-20, **VTR** = Victor 9000, **WNG** = Wang Personal Computer, **ZEN** = Zenith 100.

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Week of November 19, 1984



The Pittsburgh Press 5/23/91

Action preparing to name Comay replacement

By David Ranii

The Pittsburgh Press

Action Industries Inc.'s board of directors is expected to name a chairman to replace the late Sholom D. Comay within the next week, according to the firm's chief executive.

The 53-year-old Comay died of a heart attack Saturday. The grandson of the late Louis Berez, who founded the retail promotions company in 1917, Comay also was president of the American Jewish Committee. R. Craig Kirsch, the Harmar-based company's president and chief executive officer, declined to comment on who the board will name to succeed

Comay.

Kirsch said the board also plans to expand by one or two directors so it can bring in additional outside directors. That move, which was mapped out before Comay's death, is designed "to provide overall balance on the board to make decisions that can help this company grow and enhance shareholder value."

Comay's death reduced the number of directors to six. Only two of those are outside directors.

The company's chairman all have been members of the Berez/Comay family, which owns 26.3 percent of the company's outstanding stock. Comay was named chairman last year following the retirement of Ernest S. Berez, Louis Berez's son.

The death of Comay and last year's retirement by

Berez leaves just two family members working for the company: Joel Berez, senior vice president of operations, and Steve Berez, vice president of inventory management.

"They are here because they are extremely bright, extremely well-positioned to help the company with the restructuring effort. They are not here as a result of their being family members," said Kirsch, who was brought in last year to turn around the company's finances.

"When people think of Action Industries, I would hope they think of it as a well-run, professional organization, not a Berez family company, because it's not," Kirsch added.



I **ZORK**™

Zork Users Group

Box 20923

Milwaukee, WI

53220-0923

Zork is a trademark of Intergum, Inc.

TO: Production Department Staff

FROM: His Royal Highness

RE: Hours Spent on the Job

It has recently come to my attention that members of this department have been staying here as long as I do. This is an intolerable situation which must stop, at least for one night. In order to accomplish this you are to purchase a pair of tickets to the theater of your choice and then bring the tickets (or if you are slow filling out forms, the stubs) to Linda Avery who will arrange a speedy refund from the Royal Treasury. Please remember two things: (1) Get good seats since there's no point in not being able to see or hear, (2) Reviews are coming soon and anyone who fails to follow this command will have to answer for it.

Happy Holidays,

Emie

INFOCOM

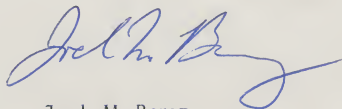
December 15, 1983

To: Selected Employees

1983 has certainly been a banner year for Infocom with sales well over \$5 million - more than triple last year's. Along with this we have gained recognition as an innovator and a leader not only in the interactive fiction category, but in the software market as a whole.

To express our sincere appreciation to all of our employees who have contributed to this year's success, the officers and directors of Infocom are pleased to announce a special bonus. All members of the R&D staff who have produced a product in the market this year are eligible as well as all members of the support departments (Administration, Accounting, Production, Marketing, and Sales).

We wish you all a pleasant holiday season and look forward to another record year in 1984.

A handwritten signature in blue ink, reading "Joel M. Berez". The signature is stylized with a large, sweeping "J" and a long, horizontal stroke extending to the right.

Joel M. Berez
President

A. DUTIES PERFORMED:

No.	DESCRIPTION OF DUTIES	Time Per Period
	DAILY:	
1	Sales calls to distributors and dealers	2 hrs
2	Taking most incoming calls from dealers and distributors and handling their inquiries or routing them to the appropriate person or department.	2 hrs
3	Reading most sales mail and responding to it accordingly, by either writing back, sending info, calling, etc	1 hr
4	Filling out request forms for dealer packs, additions to our mailing list, demo kits, etc.	½ hr
5	Take orders over the phone and through the mail	1 hr.
6	Process orders - order entry on VAX	½ hr
7	Report shipping status to customers	½ hr
8	Rectify shipping errors of several types	¼ hr
9	Advise customers on credit status, i.e. Credit hold, etc.	½ hr
10	Help accounting with collection through the buyers	½ hr
11	Writing and typing own correspondence	½ hr
12	Advising customers of co-op accruals, policies, etc.	¼ hr
13	Complete export forms for foreign customers	¼ hr
14	Assign Return Authorization numbers	¼ hr
15	Some filing	5 min
16	Generally meeting all of the needs of our customers	all day

(Add extra sheets if necessary)

B. OFFICE MACHINES AND EQUIPMENT USED: (1) Check below the type of machine or equipment used. (2) Write in the name or make, and (3) indicate average percentage of time used daily (D), or weekly (W), or monthly (M):

TYPE OF MACHINE	(1) Check	VARIETY (2) OR MODEL	(3) D%	(3) W%	(3) M%	TYPE OF MACHINE	(1) Check	VARIETY (2) OR MODEL	(3) D%	(3) W%	(3) M%
Bookkeeping						Dictating					
Calculating	X		½ %			Computer Other	X	VAX	3 %		
Tabulating						Other					
Typewriter	X		1 %			Other					

C. EDUCATION REQUIRED: (1) Check the minimum basic educational knowledge which this position requires, whether acquired in school or elsewhere; and (2) write in specific subject courses or equivalent required, if any:

SCHOOL OR EQUIVALENT	(1) Check One	LIST SUBJECT COURSES (2) OR EQUIVALENT REQUIRED
Four-year high school	X	
Plus specialized training, (up to one year) OR		
Plus extensive, specialized training, (2 to 2½ years) OR		
Plus broad technical training equivalent to 3-4 year apprenticeship.		

D. EXPERIENCE REQUIRED: Check below the time it will take the usual person to learn to perform the duties of the position satisfactorily under normal supervision, assuming a person has the education prescribed above. This period will include any formal training within the company:

☐ Up to 3 months
 ☐ Over 3 months up to 1 year
 ☒ Over 1 year up to 3 years
 ☐ Over 3 years up to 5 years

E. JUDGMENT REQUIRED: List the number of the duty or task from Section A opposite the statement below which most nearly describes the decisions you must make on procedure or method.

A few methods and procedures are definitely prescribed and followed:	4, 5, 6, 7, 12, 13, 15, 18, 21, 26
Apply clearly prescribed standard practice, using several procedures, with some decisions required.	3, 11, 14, 19, 20, 24
Must analyze facts and determine action using a wide range of procedures but within limits of standard practice.	1, 2, 8, 9, 10, 16, 17, 22, 23, 25

F. SUPERVISION OF YOUR WORK: List the number of the duty or task from Section A opposite the statement below which most nearly describes the extent it is supervised:

Short assignments, regularly checked by Supervisor.	
Proceed alone, under standard practice, refer questionable cases to Supervisor.	1-19, 21-26
Plan own work after definite objective set by Supervisor, unusual cases referred to Supervisor.	20

G. ERRORS WHICH ARE NORMAL IN YOUR WORK: List the number of the duty or task from Section A opposite the statement which most nearly describes what happens when normal errors occur in it.

Errors are quickly detected because of systematic check or cross-check

Errors usually caught in succeeding operations, involve several people in a clerical correction.

6, 8

For duties whose numbers are listed opposite second statement above, explain the nature of the usual error, how far it goes before correction, what are its consequences in lost time or money.

Order processing errors can result in minor corrections by the accounting department but are most often corrected by myself through Return

Authorizations and new orders. Shipping errors are corrected by myself as well as the production department.

H. CONTACTS WITH OTHERS: List (1) who you must contact on your position; (2) why you must do so; and, (3) how frequently.

POSITIONS OR PERSONS CONTACTED ⁽¹⁾	SUBJECT OF CONTACT ⁽²⁾	FREQUENCY IN NORMAL DUTIES ⁽³⁾
Debbie Reilly	Customer Account Status	3x daily
Ernie Brogmus	Availability of Product	2x daily
Alan Goodhue	Shipping Status	1x daily
Gayle Syska	Mailing list status Material Availability	3x weekly

I. IF YOU WORK WITH OR HAVE ACCESS TO ANY CONFIDENTIAL DATA, CHECK TYPE OF INFORMATION BELOW:

☐ Wages and Salaries

☐ Costs

☐ Financial Statements

☐ Confidential Customer Relations on Prices, Delivery, Etc.

☐ Company Records, Minutes, Etc.

☐ Company Plans, Designs, Development Programs, Etc.

☐ (Other) _____

☐ (Other) _____

J. WORKING CONDITIONS: Check one of squares and list any unusual conditions in your working environment.

☒ Usual Office Conditions

☐ Shop Conditions

☐ Part Shop and Part Office Conditions

Unusual Conditions: _____

APPROVED BY: _____

POSITION
RATED BY: _____

DATE: _____

DATE: _____

INFOCOM

POSITION DESCRIPTION

Position Title: Junior Customer Sales Representative

Job Code: NE4

Position Level: Non-Exempt

Date: 12/28/84

Primary Function:

Primarily responsible for ensuring Sales Department has accurate, current information on customer accounts. Coordinates customer accounts and orders.

Principal Duties and Responsibilities:

1. Assist Senior Sales Representative with taking orders and order entry.
2. Keep customers informed of product availability as well as order status and credit status.
3. Keep order logs, review orders against credit hold/limit tests. Track orders to ensure timely shipment.
4. Assist customers with general inquiries as well as making regular sales calls to our customers.
5. Handle returns: assign Return Authorization numbers, check in returns. Submit paperwork to accounting for credits.
6. Coordinate special order handling with warehouse; including CODS, foreign shipments and special customer requests.
7. Maintain current information on stock shipment status obtained from Production and Shipping. Prepare reports for customers upon inquiry and for Sales Representative daily.

Knowledge and Experience:

1. Basic knowledge of order processing systems.
2. Good understanding of automated accounting systems.
3. Attention to detail. Excellent follow through skills.
4. Good communication with an understanding of customer satisfaction.
5. Pleasant telephone manner.

Educational Requirements:

High School Diploma with up to one year of order processing related experience.

Prepared by:

Judith M. Foreythe
12/28/84

Approved by:

Elizabeth Rock
12-28-84

Date:

Date:

Job Responsibilities

- taking orders
- processing orders
- relaying shipping status
- filling out export forms
- filing/refiling
- filling out request forms
- writing & typing of correspondence
- announcing new products
- sales calls
- reviewing distributor applications for approval/rejection
- giving out RA #'s
- processing returns - replacements & credits
- designing forms & procedures as necessary
- advising customers on co-op accruals, policies, etc.
- taking most all calls from dealers & distributors and referring them to the right people, places, etc.
- working with marketing on updating dealer packs, suggestions for Communiques, mailing list, etc.
- surveys occasionally involving calling 50-60 of our customers
- interacting with customers & marketing on special promos
- helping with collections through the buyers
- generally meeting all of the needs of our customers

Crash kills driver on Storrow Drive

A Somerville man died of multiple internal injuries early yesterday morning after losing control of his car on Storrow Drive just outside the Storrow Tunnel, Metropolitan Police said.

Philip Trabucco, 21, of Fremont Street, was pronounced dead at Massachusetts General Hospital at 3:50 a.m., an hour

after his 1979 Chevrolet Monte Carlo was "totaled." In the accident, according to Metropolitan Police Officer Daniel Jefferson.

Jefferson, who was at the accident scene, said an unidentified doctor who was driving by stopped to administer CPR to the victim, who was conscious at first, but then lapsed into unconscious-

ness before being taken to MGH by ambulance.

Police estimated that Jefferson was traveling at least 20 m.p.h. over the posted speed limit. "He hit the wall on the left hand side of the road and then crashed into the right hand side of the road," Jefferson said.

GLOBE

3/3/86

computer games with old-fashioned board-strategy games Comes boxed with board and playing pieces. A Monopoly for the '80s.

❑ **PLANETFALL** ★ ★ ★ Intocom for Apple, Atari, Commodore 64, TRS-80 and others. \$49.95. Tongue-in-cheek sci-fi adventure, in which you start as an ensign swabbing the deck of the stellar patrol. Once you hit the planet, you meet a mischievous robot named Floyd, with whom you have to learn to interact. Authored by Steven Meretzky, an obvious madman.

❑ **ACTION TO DIADATICS** 1012

Home Viewer, November 1983



Distributor Sales Group

This group is responsible for servicing all distributors and other direct customers, including taking and processing orders, processing returns, processing all charges and credits to customer accounts, and cooperative advertising account administration.

The group is also responsible for internally supporting all Regional Sales Managers and others who are designated as Account Managers for the purpose of meeting sales targets and accomplishing other sales objectives.

Senior members of the group may also be responsible for account management for selected direct customers (see Account Manager description).

Specifically, the Distributor Sales Group will:

1. Take customer orders.
2. Process customer orders.
3. Track customer orders to ensure timely shipment.
4. Regularly inform customers of product availability and order status.
5. Work with Accounting to ensure that customers have sufficient credit to realize sales potential, including resolving any specific credit problems.
6. Work with Marketing and Operations to set targets/update plans to ensure that we can meet product demand.
7. Notify customers in writing of any new, or changes to existing policies, procedures, prices, and terms, and ensure that customers understand them and are willing and able to cooperate with them.
8. Distribute evaluation and complimentary copies of products to customers.
9. Work with customers to define administrative procedures for all transactions including those that result from special promotions or marketing programs.
10. Provide feedback from customers on products, distribution, and other important news to Infocom Marketing and Operations Departments to aid planning.
11. Compile reports and analyses of customer ordering patterns, volumes, and returns.
12. Participate in ordering decisions and inventory management with each customer and refer major issues to the Account Manager.
13. Support Regional Sales Managers by:
 - a) Coordinating routine communication flow from within Infocom to the field, and from the field to individuals and departments internally, including forwarding and distributing reports and memos.
 - b) Coordinating Infocom internal resources to provide Regional Sales Managers with the needed sales tools/materials.
14. Provide Account Managers with pre- and post-sales follow-up to customers including telephone sales calls and collateral materials.
15. Participate in trade and customer events as appropriate.

POSITION DESCRIPTION

Position Title: Distributor Sales Manager

Position Level:

Primary Function:

Manages Distributor Sales group in fulfilling group responsibilities in support of distributors and other direct customers. Ensures that a high level of service is provided to customers. Acts as Account Manager for selected direct customers.

Principal Duties and Responsibilities:

1. Manages and develops Distributor Sales staff.
2. Advises customers on inventory/stock management by developing and reviewing orders and stock balancing proposals and works with Account Managers to resolve major issues.
3. Maintains regular contact with key customer representatives via the telephone, ensuring their enthusiasm and support of Infocom's product lines.
4. Advises customers on cooperative advertising strategies and planning, as well as foreseeing potential deductions.
5. Works with Accounting to ensure that customers have sufficient credit to realize sales potential, including resolving specific credit problems.
6. Works with Marketing and Operations to set targets and update forecasts to ensure that product demand is met.
7. Provides field support by coordinating routine communication flow from Infocom to Regional Sales Managers, and from Regional Sales Managers to departments and individuals at Infocom, and coordinates Infocom internal resources to provide Regional Sales Managers with needed sales tools/materials.
8. Provides Account Managers with pre- and post-sales follow-up to customers including telephone sales calls and collateral materials.
9. Reviews new customer applications and recommends action.
10. See attached description of Account Manager.
11. Participates in trade and customer events as appropriate.

POSITION DESCRIPTION

Position Title: Distributor Sales Assistant

Position Level:

Primary Function:

Responsible for daily processing of orders and returns. Assists Distributor Sales Representatives in many customer-related activities. Provides administrative and secretarial support for the Sales Department.

Principal Duties and Responsibilities:

1. Processes orders daily.
2. Handles returns including assigning return authorization numbers, ensuring that proper paperwork is at the warehouse prior to returns coming in, and submitting paperwork to Accounting for credit.
3. Assists Distributor Sales Representatives with taking orders, and informing customers of product availability, pricing and terms.
4. Distributes evaluation and complimentary copies of products to customers.
5. Maintains the customer files.
6. Obtains needed reports from our customers, including zip code and stock status reports.
7. Provides secretarial support for specific members of the Sales Department including; covering phones; scheduling appointments; typing/word processing correspondence, memos, and reports; handling mail and arranging meetings.
8. Arranges travel itineraries for the whole Sales Department.

POSITION DESCRIPTION

Position Title: Distributor Sales Representative

Position Level:

Primary Function:

Coordinates accounts and orders of distributors and other direct customers. Administers customer cooperative advertising accounts. Provides a high level of service to customers on an ongoing basis.

Principal Duties and Responsibilities:

1. Takes customer orders.
2. Communicates product availability, order status and credit status to customers regularly.
3. Keeps order logs, reviews orders against credit hold/limit tests, and tracks orders to ensure timely shipment.
4. Assists customers with general inquiries.
5. Makes regular telephone sales calls to customers.
6. Instructs the warehouse on special order handling, including COD's, foreign shipments and special customer requests.
7. Participates in regular production meetings and maintains current information on stock status obtained from Operations.
8. Administers all aspects of customer cooperative advertising accounts.
9. Assists in supporting Regional Sales Managers.
10. Periodically conducts customer surveys to ascertain opinions and projected product demand. Provides feedback to the appropriate departments at Infocom.

Account Manager

Each direct or major indirect customer will have an Account Manager assigned who will be responsible for meeting sales targets.

Specifically, the Account Manager:

1. Participates in setting sales targets for customer.
2. Periodically develops sales plan for customer and provides feedback to customer and to Infocom management on customer's performance vs. target and accomplishments vs. planned opportunities.
3. Develops a profile of customer based on his geography, types of customers, product categories, machines supported, organizational strengths and weaknesses, and other data which might affect customer's market position and our ability to achieve our goals through the customer long and short term.
4. Develops and maintains a smooth working relationship with customer and ensures that Infocom is always professional, responsive, and sensitive to the customer's needs.
5. Ensures Infocom's awareness of and participation in customer programs which further our ability to meet targets and goals.
6. To whatever varying extent possible, ensures that Infocom and our products receive maximum exposure through the customer.
7. Works with direct customers and the Distributor Sales Group to co-manage customer's inventory and ensure the correct product mix and stock level.
8. Ensures utilization of customer's resources including mailings, telemarketing, and seminars to convey our messages.
9. Ensures customer's utilization of Infocom resources including sales support tools, literature, and cooperative advertising.
10. Identifies and develops relationships with customer's key accounts, including providing support to customer during the selling process.
11. Educates customer, including customer's sales staff, to better sell Infocom products.
12. Participates in customer-sponsored events.

Ken

Dealer Sales Group

The Dealer Sales group is responsible for all telephone and written communication with dealers. In addition, this department is responsible for identifying and making physical sales calls to targeted dealers in designated areas as appropriate. Areas will be designated as needed to complement Regional Sales Management.

Specifically, this department will:

1. Answer dealer hotline and all other incoming dealer calls.
2. Direct all internal and external telemarketing efforts.
3. Maintain dealer database/mail list.
4. Define, with Marketing, the content of all written communication to dealers.
5. Execute mailings.
6. Work with Marketing to define all direct and indirect dealer programs and promotions.
7. Execute and administer all dealer programs.
8. Coordinate and present to Marketing the needs of the Sales Department collectively for sales literature/support materials.
9. Project usage, order and stock sales literature/materials for other Infocom departments as well as for fulfillment to dealers.
10. Participate in trade and direct and distributor - sponsored dealer events and presentations as appropriate.

EMPLOYEE BENEFITS FACT SHEET

MEDICAL, DENTAL,
& ORTHODONTIA
INSURANCE:

Coverage will continue until ~~5-3-89~~ at
Activision's expense. You have the option to
continue your current coverage for up to 18
months at your own expense under the continu-
ation program called Cobra (see enclosed
information).

LIFE INSURANCE:

Coverage terminates as of 5-3-89. However,
death within 31 days will be covered. You have
the option to purchase a form of coverage
directly from the insurance company through a
conversion program if you apply to them within
31 days after

SUPPLEMENTAL LIFE:

Coverage terminates 5-3-89. However,
death within 31 days will be covered.
Insurance conversion privileges are also
available if you apply within 31 days. To
apply for conversion, contact any local
Metropolitan Life office.

PCS CARD:

Terminates N/A .

LONG-TERM
DISABILITY INS:

Terminates 5-3-89 .

ACCRUED VACATION:

You are paid for all earned, but unused
vacation in your final check.

401(k) PLAN:

If you have been a participant in the Plan,
your balance will be distributed to you in a
lump sum check.

STOCK OPTIONS:

If you have stock options, you have 90 days
from 5-3-89 to exercise them. For
additional information on stock options,
contact Susan Scrivner in Human Resources.

EMPLOYEE STOCK
PURCHASE PLAN:

If you are participating in the plan, you will
receive a check for the contributions you have
accumulated during the quarter.

UNEMPLOYMENT
INSURANCE:

To file for this, you need to go in person to
the local Employment Development Department
office.

INFOCOM, INC.

NON-DISCLOSURE AGREEMENT

AGREEMENT ("this Agreement"), effective as of the 30th day of September, 1982, by and between Sloan E. Meretzky (hereinafter called "Employee"), and INFOCOM, INC., a Massachusetts Corporation (hereinafter called "Infocom"). In consideration of the initial grant of employment to Employee by Infocom, and the confidential nature of data of Infocom relating to business and product developments and plans disclosed to Employee, Employee and Infocom hereby represent and agree as follows:

1. Employee commenced his employment with Infocom on July 1, 1982.

2. Employee shall be entitled to remain in the employ of Infocom for such term, with the assignment of such duties, and at such compensation, as shall be determined from time to time by Infocom. The term of this Agreement shall commence on the date stated above as the effective date of this Agreement, and shall terminate when the employment by Infocom of Employee shall terminate.

3. Trade Secrets. Employee acknowledges that the nature of his engagement by Infocom is such that he shall have access to, and that there shall be disclosed to him, information of a confidential and/or trade secret nature which has great value to Infocom and which constitutes a substantial basis and foundation upon which Infocom's business is predicated. Employee acknowledges that except for his engagement by Infocom, he would not otherwise have access to such information. Employee shall keep all such confidential information and trade secrets in confidence, and shall not disclose any of such confidential information or trade secrets to any other person, except Infocom's personnel entitled thereto and other persons designated by Infocom, during the term of this Agreement or at any time thereafter, unless the prior written consent of Infocom is obtained. Employee shall not use or permit to be used such information for the gain or benefit of any party outside of Infocom or for his personal gain or benefit outside the scope of his engagement by Infocom. All lists, materials, books, files, reports, correspondence, records and other documents used by, prepared by, or made available to, Employee, except those in existence before the effective date of this Agreement owned by Employee, shall be the property of Infocom, and upon termination of this Agreement Employee shall immediately return the same and all copies thereof to Infocom.

4. Patent Rights and Copyrights. Employee shall assign, and does hereby assign, to Infocom, all of Employee's right, title and interest in and to all inventions, improvements, develop-

ments, trade secrets, discoveries, computer software, tradenames and trademarks conceived, improved, developed, discovered or written by Employee, alone or in collaboration with others, during the term of this Agreement which relate in any manner to the business of Infocom, whether or not the same shall be conceived, improved, developed, discovered or written during customary working hours on Infocom's premises. Employee shall promptly and fully disclose to Infocom all such matters within the scope of this Paragraph 4, and, upon request of Infocom, execute, acknowledge, deliver and file any and all documents necessary or useful to vest in Infocom all of Employee's right, title and interest in and to all such matters within the scope of this Paragraph 4, and in and to all letters patent, trade secrets, copyrights, tradenames and trademarks, of the United States and other countries, corresponding thereto, or for the enforcement and protection of such rights, titles and interests. All expenses incurred in connection with the execution, acknowledgement, delivery and filing of any papers or documents within the scope of this Paragraph 4 shall be borne by Infocom.

5. Proprietary Rights of Others. Employee shall not disclose to Infocom, and shall not induce Infocom to use, any proprietary information or trade secrets of others.

6. Remedies. Infocom and Employee acknowledge that the services to be rendered by Employee to Infocom under this Agreement are of a special, unique, unusual, extraordinary, and intellectual character. Accordingly, any breach on the part of Employee of the matters undertaken by Employee in this Agreement to be observed and performed by him shall entitle Infocom to commence an action against Employee for damages and/or for an injunction to enjoin and restrain Employee from the breach of such undertaking. Employee shall pay to Infocom all costs and expenses (including reasonable attorneys' fees and disbursements) incurred by Infocom in enforcing any term of this Agreement.

7. Separability of Covenants. In the event any provision of this Agreement is held unenforceable or invalid by any court of competent jurisdiction, the enforceability and validity of the remainder of this Agreement shall not be affected thereby.

8. This Agreement shall be governed by, and construed in accordance with, the laws of the Commonwealth of Massachusetts.

IN WITNESS HEREOF, Employee and Infocom have set their hands and seals this 30th day of September, 1981.

INFOCOM, INC.

By: [Signature]

EMPLOYEE

Name: [Signature]

Steven Meretzky hereby agrees to perform 40 hours of work on *Zork Zero*, with such work to take place during a two-week period beginning Tuesday, May 30. In exchange for this work, Mediagenic hereby guarantees to pay Steven Meretzky his agreed upon severance through August 4, 1989, even if he is hired by another employer prior to August 4, 1989, provided that the IBM version of *Zork Zero* code releases by June 30, 1989. In the event that Steven Meretzky does not receive his entire severance -- that is, the IBM version of *Zork Zero* does not code release by June 30, 1989 and he begins work for another employer prior to August 4, 1989, Mediagenic will pay Meretzky \$1600.00 for this work. This payment will be due on August 4, 1989. UP TO J J SEM AT A RATE OF \$40.00 PER HOUR. J J SEM

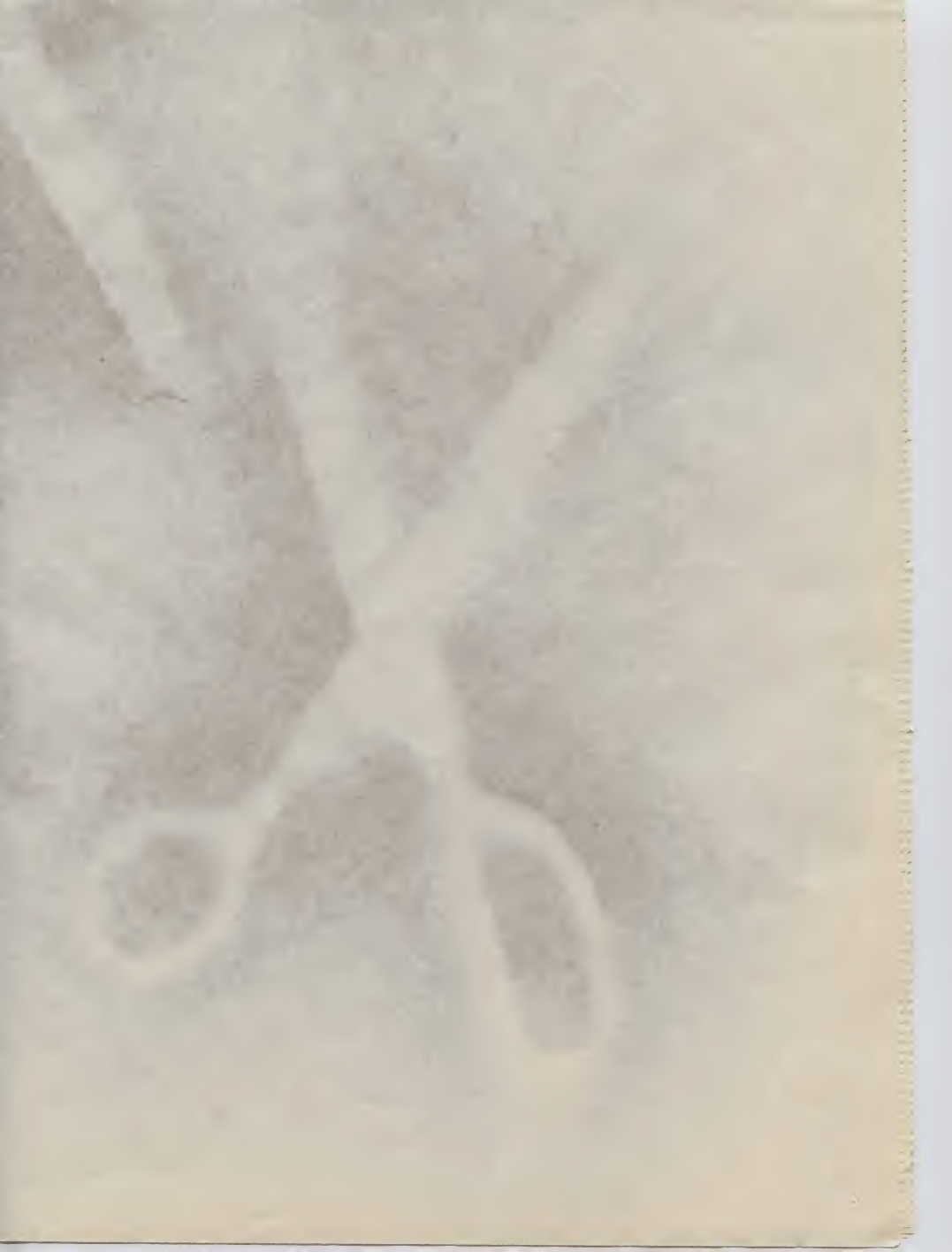
If he begins work for another employer prior to June 30, 1989, Steven Meretzky will continue to receive his severance through at least June 30, 1989, and will make an appropriate refund if the IBM version of *Zork Zero* fails to code release by June 30, 1989.

Steven Meretzky
(signed) Steven Meretzky

5-22-89
date

Joseph Ybarra
(signed) Joe Ybarra
for Mediagenic

5/23/89
date



Obituaries

J.C.R. Licklider, MIT professor, pioneer in computer use; at 75

J.C.R. Licklider, a psychologist and professor emeritus at the Massachusetts Institute of Technology who did pioneering work in computer use, died last Tuesday at Symmes Hospital, Arlington, of complications from an asthma attack. He was 75 and lived in Arlington.

Mr. Licklider was among the first to recognize that the fullest potential of the computer could be achieved only by improving the user's ability to interact with it. He saw that computers could not only generate data but also help people in thinking, understanding and decision making.

His vision for improving the human-computer dialogue was outlined in papers he published in the early 1960s.

The program he outlined for achieving what he called "man-computer symbiosis" was supported by the Advanced Research Projects Agency of the Defense Department, which established the first large-scale experimental computer science research projects at universities across the country. The first of these was Project MAC at MIT, which Mr. Licklider headed in 1968-70. It is now the MIT Laboratory for Computer Science.

He also made important contributions to the application of computers to modern libraries, introducing the concepts of digital computers and telecommunications into the processes of information storage and retrieval.

Mr. Licklider was one of six persons to share the 1990 Common Wealth Awards of Distinguished Service. He was nominated for the honor by Sigma XI, the Scientific Research Society.

Mr. Licklider, a native of St. Louis, graduated from Washington University in 1937. He received a doctorate in psychology at the University of Rochester in 1942.

From 1943 to 1950 he was a researcher at Harvard University's Psycho-Acoustics Laboratory and a lecturer at Harvard. From 1950 to 1957 he was an associate professor at MIT and a researcher at Lincoln Laboratory and the MIT Acoustics Laboratory.

In 1957 Mr. Licklider joined

ing psychology and information systems research. The following year he was elected president of the Acoustical Society of America.

From 1962 to 1968, he was director of information processing techniques and behavioral sciences with the Advanced Research Projects Agency in Washington. He returned to MIT in 1968 to head Project MAC and as a professor of electrical engineering. He retired in 1985.

He leaves his wife, Louise (Carpenter); a son, Tracy R. of Cambridge; a daughter, Linda L. Smith of Arlington; and two grandchildren.

A memorial service is planned.

Charles W. Walker, 64

Was cost analyst at GE

Charles W. Walker of Auburndale, a cost analyst at General Electric Co. in Burlington since 1961, died Sunday at Newton-Wellesley Hospital, apparently of a heart attack. He was 64.

Born in Waltham, Mr. Walker graduated from Waltham High School, and attended Boston University and Massachusetts Institute of Technology. During the War, he served in the Coast Guard.

Mr. Walker was a former master of Boy Scout Troop 100 in Auburndale and an administrator at the Church in Auburndale for almost 20 years at the time of his death. He was also an avid golfer.

He leaves his wife, Louise (Stevens); three sons, Vincent, Brian C. of Seekonk, and Andrew J. of Auburn; two daughters, Mary T. of Waltham and Barbara J. of Auburndale; a sister, Frances, of St. Petersburg, Fla.; and two grandchildren.

A funeral Mass will be held at 10 a.m. Friday in St. John's Church. Burial will be in Waltham Cemetery.

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In 1957 Mr. Licklider joined Bolt, Beranek and Newman as vice president and head of the departments of psychoacoustics, engineer-

cal Society of America. From 1962 to 1968, he was director of information processing techniques and behavioral sciences with the Advanced Research Projects Agency in Washington. He returned to MIT in 1968 to head Project MAC and as a professor of electrical engineering. He retired in 1985.

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He leaves his wife, Mary (Stevens); three sons, Vincent, Brian C. of Waltham and Andrew J. of Auburndale; two daughters, Mary T. of Waltham and Barbara J. of Auburndale; a sister, Frances, of St. Petersburg, Fla.; and two grandchildren, Michael and Jennifer, of San Francisco.

A funeral Mass will be held at 10 a.m. Friday in the First Church. Burial will be in Mount Waltham Cemetery, Waltham.

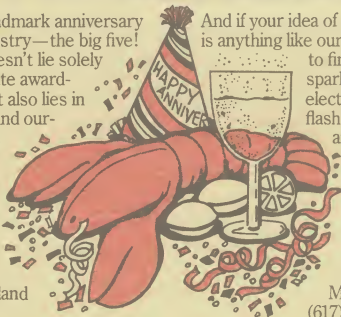
Rev. Ray

Philosophy

**INFOCOM'S NEWEST
INTERACTIVE ADVENTURE
WILL NOT BE AVAILABLE
IN ANY STORE.**

**IT'S THE INFOCOM FIFTH ANNIVERSARY CELEBRATION,
AVAILABLE ONLY ON THE EVENING
OF JUNE 23RD IN CAMBRIDGE.**

We've reached a landmark anniversary in the software industry—the big five! But our success doesn't lie solely in our ability to create award-winning software. It also lies in our ability to surround ourselves with only the best people in the computer industry. That's why we're inviting you to be our guest for a fabulous evening highlighted by an authentic New England clambake.



And if your idea of a really great party is anything like ours, you'll be delighted to find lavish libations, sparkling celebrities, electrifying conversation, flashdanceable live music and more.

We hope you'll join us at 6 P.M. on Saturday, June 23rd at Infocom, Inc., 55 Wheeler Street, Cambridge, Massachusetts, (617) 492-1031.

It promises to be the most fun you'll ever have without a computer.

WALLEY BALL SCHEDULE

OCTOBER - NOVEMBER

	6:00 - 7:30	7:30 - 9:00
OCT 25	BPS vs SPINNAKER	LOTUS vs INFOCOM
NOV 1	LOTUS vs BPS	INFOCOM vs SPINNAKER
NOV 8	BPS vs INFOCOM	SPINNAKER vs LOTUS
NOV 22	SPINNAKER vs BPS	LOTUS vs INFOCOM
NOV 29	BPS vs LOTUS	INFOCOM vs SPINNAKER

**Wishing you all
the best
this season**

From your friends at



BANK OF BOSTON

INFOCOMTM

**Software Softball
1986 Schedule**

Date	Time	Opponent	Field	Score
May 22	5:30	ITP	6	<u>RAIN</u>
May 29	7:00	General Computer	6	<u>8</u> <u>25</u> (0-1)

INFOCOMTM

Software Softball 1986 Schedule

Date	Time	Opponent	Field	Score
May 22	5:30	ITP	6	<u>RAIN</u>
May 29	7:00	General Computer	6	<u>8</u> <u>25</u> (0-1)
June 5	5:30	VentureCom	6	<u>RAIN</u>
June 12	5:30	Spinneraker	6	<u>RAIN</u>
June 19	7:00	Javelin	5	<u>13</u> <u>12</u> (1-1)
July 3	7:00	VentureCom CSA Press	6	<u>1</u> <u>6</u> (1-2)
July 10	7:00	Lotus	6	— —
July 17	7:00	Miller	5	— —
August 7	5:30	BPS	5	— —
August 14		Playoffs		— —
August 21		Championship		— —

June 12	5:30	Spinnaker	6	<u>RAIN</u>	
June 19	7:00	Javelin	5	<u>13</u>	<u>12</u> (1-1)
July 3	7:00	CSA Press ^{Yentorg Com}	6	<u>1</u>	<u>6</u> (1-2)
July 10	7:00	Lotus	6	—	—
July 17	7:00	Miller	5	—	—
August 7	5:30	BPS	5	—	—
August 14		Playoffs		—	—
August 21		Championship		—	—

Good Luck
to our
favorite tenants
Spaulding & Slye

Investment Builders, Brokers and Managers
125 Cambridge Park Drive, Cambridge, MA 02140 617-523-8000
Boston/Charlotte/Oklahoma City/Washington, D.C.

Software Softball 1985 Schedule

Tues 5/21 5:30 Lotus at BPS 7:00 CSA at Infocom	Thurs 6/20 5:30 Miller at Infocom 7:00 Lotus at Softbridge
Thurs 5/23 5:30 Lotus Opr at Miller 7:00 Softbridge at Spinnaker	Tues 6/25 5:30 Spinnaker at Lotus 7:00 BPS at Softbridge
Tues 5/28 5:30 BPS at Miller 7:00 Spinnaker at Lotus Opr	Thurs 6/27 5:30 Lotus Opr at Infocom 7:00 CSA at Miller
Thurs 5/30 5:30 Infocom at Softbridge 7:00 CSA at Lotus	Tues 7/2 NO GAMES Thurs 7/4 NO GAMES
Tues 6/4 5:30 Spinnaker at BPS 7:00 Infocom at Lotus	Tues 7/9 5:30 Infocom at Spinnaker 7:00 BPS at CSA
Thurs 6/6 5:30 Miller at Softbridge 7:00 CSA at Lotus Opr	Thurs 7/11 5:30 Lotus at Miller 7:00 Softbridge at Lotus Opr
Tues 6/11 5:30 Infocom at BPS 7:00 Lotus Opr at Lotus	Tues 7/16 Makeups
Thurs 6/13 5:30 Miller at Spinnaker 7:00 Softbridge at CSA	Thurs 7/18 Makeups
Tues 6/18 5:30 BPS at Lotus Opr 7:00 Spinnaker at CSA	1985 Championship Playoffs Tues 7/23 through Thurs 8/22 To be announced

All games will be played at Tufts University in Medford/Somerville. Tuesday games will be played on field # 1 , Thursday games on field # 3.

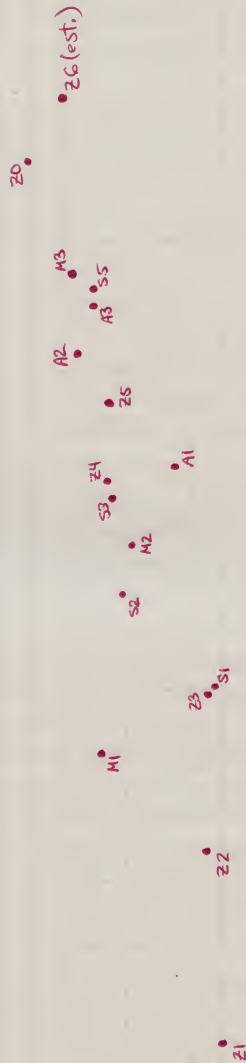
The winning team should call in the score of the game to Chuck Anthony of CSA at 568-0301.

Some Thoughts

- * Although there are no fixed hours during which all developers must work, it is expected that everyone will have a regular set of hours during the day during which he will be at the office. Gabrielle and I should know what these hours are so that we can plan for meetings, phone calls, and the like.
- * If it becomes necessary to leave for a short while during the day, be sure to leave me a note indicating when you will be back. Also, Gabrielle should also be informed so that phone calls can be answered correctly.
- * If you intend to leave for an extended time (e.g. leaving very early, taking off an afternoon, etc.), please ask me in advance so that I can make plans. It will become very difficult to coordinate such things as machine resources if people are randomly coming and going during the day.
- * If you need help, don't hesitate to ask whoever is around. If you feel stuck at a particular point, go on to do something else. If all else fails, be creative and design something new, spectacular, and profitable. It is hard to believe that there is nothing useful to be done.
- * If it is important to set aside a chunk of time to discuss something or other with me, make an appointment. Otherwise, things will tend to come up which interrupt the discussion.'
- * If a group meeting to discuss something or other (a design for a game, problem, new ideas, etc.) would be useful, ask me and I will arrange one.
- * If there are problems of any other kind, work or non-work related, which are causing difficulties, I will try my best to be helpful.

SIZE OF GAME VERSUS DATE OF RELEASE

SS (est.)





BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 1281 CAMBRIDGE, MA 02138

NO POSTAGE
NECESSARY
IF MAILED IN THE
UNITED STATES



Postage will be paid by addressee

INFOCOM

55 Wheeler St.
Cambridge, MA 02138

Owner Warranty Card

Please complete and mail this card within 10 days of purchase to validate the warranty, and to receive the latest information on the INTERLOGIC® Prose Group and game-playing accessories.

Name ANTHONY J. BRIZZOLARA
 Company ATLANTA BRAVES
 Address 2207 N. CROSSING WAY
 City DECATUR State GA Zip 30033
 Occupation PROFESSIONAL BASEBALL PLAYER Age: 27
 Program name DEADLINE Date purchased 01/03/83
 Serial number (if applicable) _____
 Purchased from RIISING SUN SOFTWARE
 Comments about program I GUESS I'M NOT AS TALENTED
IN EDUCATING AS I THOUGHT I WAS.

Computer brand APPLE IIe Date purchased 12/10/83
 Memory size 128 K Number of disk drives ONE
 Do you ☒ Own ☐ Share ☐ Use at work/school
 How much computer experience do you have?
☐ Very little ☒ Some ☐ A lot ☒ Write own programs
 Total number of software products purchased for above computer 4
 Total number of games purchased for above computer 3
 Indicate those application areas where you use or intend to use your computer, from most (1) to least (10).

- | | |
|--|---|
| <input checked="" type="checkbox"/> Entertainment | <input type="checkbox"/> Calculations |
| <input checked="" type="checkbox"/> Personal finance | <input checked="" type="checkbox"/> Business bookkeeping |
| <input checked="" type="checkbox"/> Personal information | <input checked="" type="checkbox"/> Other business uses |
| <input checked="" type="checkbox"/> As a hobby | <input checked="" type="checkbox"/> Writing computer programs |
| <input checked="" type="checkbox"/> Word processing | <input checked="" type="checkbox"/> Education (school & home) |
| <input type="checkbox"/> Other _____ | |

I'm interested in the following types of software products: STRATEGY - ADVENTURE

INFOCOM

Infocom, Inc., 55 Wheeler St., Cambridge, MA 02138

A WAGER

August 6th, 1983

Terms: That Infocom will receive 100 or more "Planetfall" postcards in the mail from "Planetfall" purchasers during the period September 1, 1983 through August 31, 1984.

The winner of this wager shall be owed by the loser a dinner at the restaurant of the winner's choice, the cost of said dinner not to exceed \$50.

In case of dispute over any of the terms in this wager, the dispute shall be settled by an impartial party. The signers agree on the following people as impartial parties:

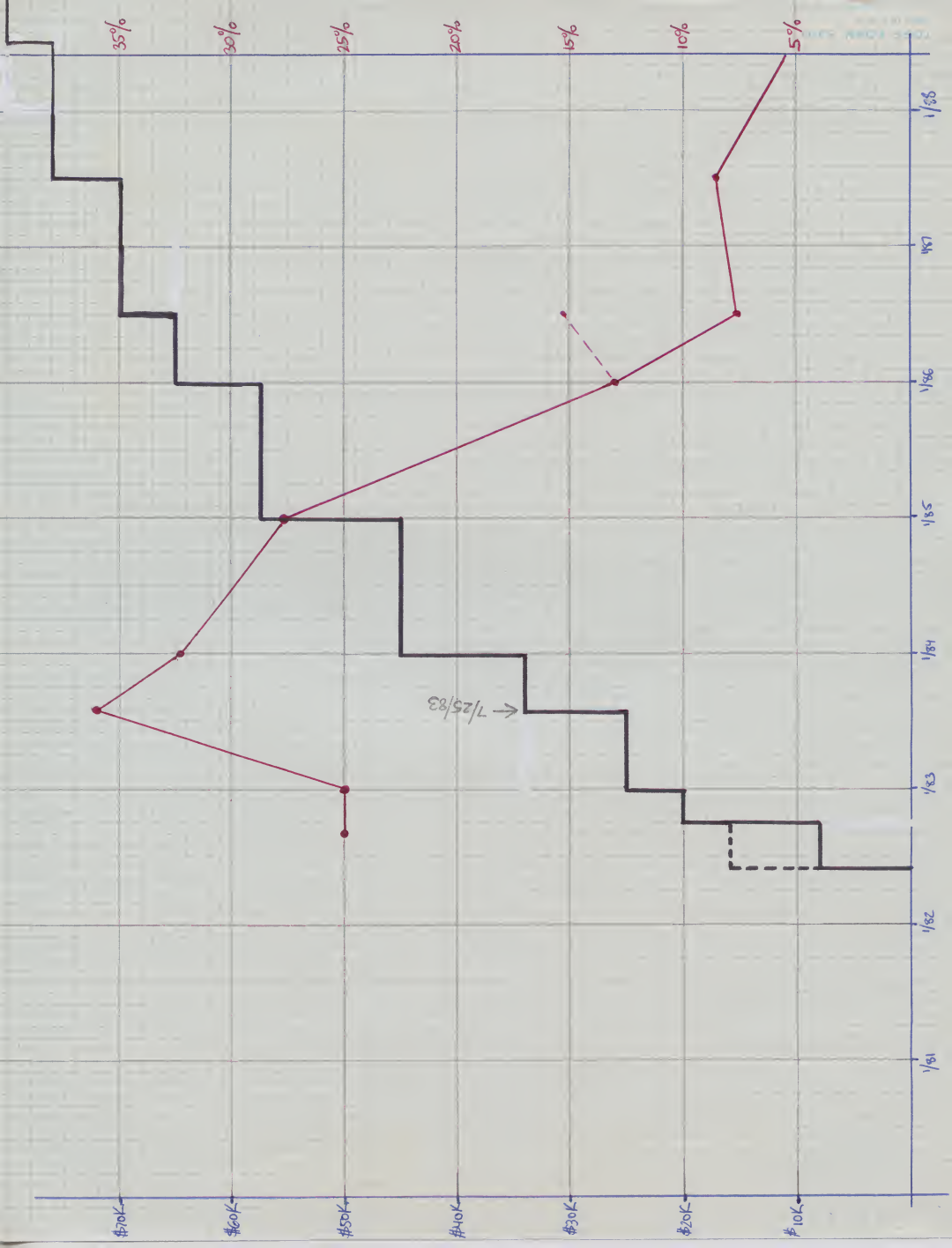
- William R. Short
- Ernest C. Brogmus
- Edward H. Black

Michael Dornbrook will be the winner if the terms of the wager are met.
Steven Meretzky will be the winner if the terms of the wager are not met.

Signed:

~~Steven Meretzky~~
Steven Meretzky

~~Michael Dornbrook~~
MICHAEL DORNBROOK



INFOCOM PRODUCT DEVELOPMENT LABOR REPORT FORM

NAME: Steve Meretzky

MONTH, YEAR: September 1982

ACTIVITY CODE	PRODUCT	HOURS WORKED BY WEEK (enter ending dates)				BRIEF DESCRIPTION OF ACTIVITIES
		9/4	9/11	9/18	9/25 /	
T	Starcross	8	0	0		Advanced Beating
O	Forms	4	0	1		Design of forms
O	ZIL Training	0	5	2		Reading Manual, etc.
O	Rnode Document	0	6	2		Creation of document on basic Rnode commands
D	Deadline	0	0	12		shrinkling for TRS-80 Model I
	TOTALS	12	11	17		

ACTIVITY CODES: D = development, T = testing, M = maintenance, O = other (specify)

PRODUCT: Examples--Zork I, IBM Interpreter, Infobase, Mu-system

END OF WEEK: Enter the ending date of the week (Saturday). Each month should include only those weeks that end in that month. Enter the number of hours worked on each project as well as the total number of hours for the week. Each major project should have its own line.

END OF MONTH: Total the hours worked for each project, and give a brief description of your major activities for each. (Example-- "improved parser, fixed reported bugs")

INFOCOM PRODUCT DEVELOPMENT LABOR REPORT FORM

NAME: Steve Menetsky MONTH, YEAR: August 1982

ACTIVITY CODE	PRODUCT	HOURS WORKED BY WEEK (enter ending dates)					BRIEF DESCRIPTION OF ACTIVITIES
		8/7	8/14	8/21	8/28	Tot.	
T	Starcross	21	1	10	31	63	the usual, plus supervising "auxiliary" testers
D	Starcross	0	11	6 1/2	9 1/2	27	shrinking, simple bugs
T	ZORK 3	0	2	8	0	10	the usual
T	ZORK 1	0	1	0	0	1	testing new version
T	Apple, Atari, IPC interps.	0	5	0	0	5	testing revised Apple/Atari, new APC
	TOTALS	21	20	24 1/2	40 1/2	106	

ACTIVITY CODES: D = development, T = testing, M = maintenance, O = other (specify)

PRODUCT: Examples--Zork I, IBM Interpreter, Infobase, Mu-system

END OF WEEK: Enter the ending date of the week (Saturday). Each month should include only those weeks that end in that month. Enter the number of hours worked on each project as well as the total number of hours for the week. Each major project should have its own line.

END OF MONTH: Total the hours worked for each project, and give a brief description of your major activities for each. (Example--"improved parser, fixed reported bugs")

INFOCOM PRODUCT DEVELOPMENT LABOR REPORT FORM

NAME: Steve Menetsky MONTH, YEAR: July, 1982

ACTIVITY CODE	PRODUCT	HOURS WORKED BY WEEK (enter ending dates)							BRIEF DESCRIPTION OF ACTIVITIES
		7/3	7/10	7/17	7/24	7/31	Tot.		
T	Zork 3	14	0	5	3	4 1/2	26 1/2	beating	
D	Zork 3	4	0	2	0	12	18	fixing simple bugs, shrinking text	
D	TRS-80 Card	2	15	0	0	0	17	writing card	
O	Testing Check lists	0	2	0	0	0	2	writing check lists	
T	Starcross	0	4	15	13	6	38	full range of testing services	
T	Zork 2 (1)	0	0	0	3	0	3	extreme beating	
O	QUE Product Desc's	0	0	0	0	1 1/2	1 1/2	adapting GR descriptions for QUE publications	
	TOTALS	20	21	22	19	24	106		

ACTIVITY CODES: D = development, T = testing, M = maintenance, O = other (specify)

PRODUCT: Examples--Zork I, IBM Interpreter, Infobase, Mu-system

END OF WEEK: Enter the ending date of the week (Saturday). Each month should include only those weeks that end in that month. Enter the number of hours worked on each project as well as the total number of hours for the week. Each major project should have its own line.

END OF MONTH: Total the hours worked for each project, and give a brief description of your major activities for each. (Example-- "Improved parser, fixed reported bugs")

INFOCOM PRODUCT DEVELOPMENT LABOR REPORT FORM

NAME: Steve Menetzky MONTH, YEAR: June, 1982

ACTIVITY CODE	PRODUCT	HOURS WORKED BY WEEK (enter ending dates)					BRIEF DESCRIPTION OF ACTIVITIES
		6/5	6/12	6/19	6/26	Tot.	
D	Mini-Zork	14	0	0	0	14	shrinking Zork One
T	Zork III	10	8	8	15	41	the usual
T	SF	4	7 1/2	8	0	19 1/2	the usual
D	Zork III	0	8	0	0	8	fixing simple bugs, writing descriptions
D	Cyborg	0	3 1/2	0	0	3 1/2	playing original cyborg
O	Cleaning Comp km	0	1 1/2	0	0	1 1/2	
D	SF II	0	1	0	0	1	
	TOTALS	28	29 1/2	22	15	94 1/2	
	0 MD/214/R-11 session	0	0	6	0	6	

ACTIVITY CODES: D = development, T = testing, M = maintenance, O = other (specify)

PRODUCT: Examples--Zork I, IBM Interpreter, Infobase, Mu-system

END OF WEEK: Enter the ending date of the week (Saturday). Each month should include only those weeks that end in that month. Enter the number of hours worked on each project as well as the total number of hours for the week. Each major project should have its own line.

END OF MONTH: Total the hours worked for each project, and give a brief description of your major activities for each. (Example -- "Improved parser, fixed reported bugs")

Action Tool 2: How to Successfully Implement Your Plans
NASA SPACE PROBLEM

Instructions: You are a space crew originally scheduled to rendezvous with a mother ship on the lighted surface of the moon. Due to mechanical difficulties, however, your ship was forced to land at a spot some 200 miles from the rendezvous point. During re-entry and landing, much of the equipment aboard was damaged and, since survival depends on reaching the mother ship, the most critical items available must be chosen for the 200 mile trip. Below are listed the 15 items left intact and undamaged after landing. Your task is to rank order them in terms of their importance in allowing your crew to reach the rendezvous point. Place the number 1 by the most important item, the number 2 by the second most important, and so on through number 15, the least important.

<u>1.</u>	<u>Astros</u>	<u>SCM</u>	
3	15	<u>12</u>	Box of matches
1	4	<u>5</u>	Food concentrate
3	6	<u>9</u>	50 feet of nylon rope
2	8	<u>6</u>	Parachute silk
2	13	<u>15</u>	Portable heating unit
3	11	<u>14</u>	Two .45 calibre pistols
8	12	<u>4</u>	One case dehydrated Pet Milk
-	1	<u>1</u>	Two 100 lb. tanks of oxygen
4	3	<u>7</u>	Stellar Map (of the moon's constellation)
1	9	<u>10</u>	Life raft
1	14	<u>13</u>	Magnetic compass
-	2	<u>2</u>	Five gallons of water
1	10	<u>11</u>	Signal flares
1	7	<u>8</u>	First aid kit containing injection needles
2	5	<u>3</u>	Solar-powered FM receiver-transmitter
32			

EMPLOYEE LISTING, JUNE 11, 1984

Department	Name	Title	Office	Ext.
Sales	Accardi, Gabrielle	Assistant to the President	T115	21
Consumer Marketing	Anderson, David	Product Testing Supervisor	T114	37
Administration	Anderson, Marcia	Manager of Facilities and Administration	T21	48
Consultant	Anderson, Tim	Consultant	T222	71
Administration	Andrews, Amy	Accounting Clerk	T19	47
Administration	Avery, Linda	Personnel Secretary	T204	14
Consumer Marketing	Aviges, Joanne	Junior Product Tester	T124	50
President	Berez, Joel - officer	President	T113	15
Business Products Development	Berkowitz, Brian	Senior Software Engineer	T221	29
Consumer Products Development	Berlyn, Michael	Senior Project Manager	T106	45
Business Products Development	Black, Edward	Senior Project Manager	T227	24
Consumer Products Development	Blanchard, Duncan	Junior Software Engineer	T210	81
Vice President, Product Development	Blank, Marc - officer	Consumer Vice President	T107	16
Business Products Marketing	Bodenstedt, Dorene	Customer Support Representative	T216	76
Business Products Marketing	Brackett, John	Director for Business Products Marketing	T219	76
Administration	Brogmus, Ernest	Production Manager	T10	22
Consumer Products Development	Cody, Brian	Junior Game Designer	T209	80
Business Products Development	Dilascia, Paul	Principal Software Engineer	T226A	42
Consumer Products Marketing	Dornbrook, Michael	Product Manager (Consumer products)	T121	20
Public Relations	Fasanello, Joan	Publicity Assistant	T207	19
Consumer Products Marketing	Fine, Jennifer	Technical Support Supervisor	T126	38
Administration	Forsythe, Judith	Personnel Director	T205	31
Consumer Products Marketing	Frank, Suzanne	Junior Product Tester	T124	58
Consumer Products Development	Galley, Stuart	Senior Game Designer	T102	33
Consumer Products Development	Horn, Daniel	Microcomputer Group Supervisor	T208	79,68
Business Products Development	Iison, Richard	Senior Software Engineer	T223	23

Business Products Development	Inbar, Sofi	Software Engineer	T224	49
Business Products Marketing	Jacobson, Barry	Marketing Analyst	T218	
Consumer Products Marketing	Korn, Heidi	Marketing Secretary	T120	39
Public Relations Product Development	Langosy, Elizabeth	Public Relations Services	T207	19
Consultant	Lay, Richard	Software Engineer	T209	30
Business Products Development	Lebling, David	Consultant	T101	34
Consumer Products Development	Leckband, Craig	Principal Software Engineer	T226	30
Administration	Lim, Poh	Software Engineer	T208	71, 79
	Lloyd, George	Accounting and MIS Manager	T20	41
Public Relations	Maroni, Pat	Manager of Public Relations	T206	35
Business Products Development	Martin, Larry	Technical Writer	T225	17
Administration	Mazzotta, Linda	Office Services Coordinator	T115	12
Administration	McCarron, Donna	Personnel Assistant	T202	83
Consumer Products Development	Meretzky, Steven	Senior Game Designer	T105	44
Administration	Metz, Elizabeth	Receptionist		11
Consumer Products Development	Moriarty, Brian	Software Engineer	T210	81, 28
Sales	Nelson, Ellen	Sales Secretary/Consumer Products	T114	52
Administration	O'Connor, Mary Ellen	Accounts Payable Clerk	T19	47
Consumer Products Marketing	O'Leary, John	Director of Consumer Products Marketing	T123	59
Consumer Products Marketing	O'Neill, Jeff	Junior Product Tester	T124	58
Consumer Products Development	Palace, Jonathan	Editor of InterLogic Products	T108	36
Business Products Development	Quinn, Michael	Technical Writer	T224	67
Administration	Raup, Angela	Graphics Services Buyer	T6	56
Consultant	Reeve, Christopher	Consultant	T222	72
Administration	Reilly, Deborah	Supervisor of Credit and Collections	T19	46
Sales	Rock, Elizabeth	Inside Sales Representative	T114	70
Business Products Development	Sawtelle, Mark	Technical Writer	T225	66
Administration	Simpson, Michelle	Purchasing Agent	T3	78
Business Products Development	Smaldone, Thomas	Marketing Communications Manager	T215	82

Business Products Marketing	Sorkin, Renata	Administrative Assistant for Business Products	T220	77
Business Products Marketing	Star, Barry	Product Analyst	T216	
Public Relations	Steere, Spencer	Public Relations Secretary	T220	57
Administration	Swarms, Ed	Mail Clerk	T2	78
Consumer Products Marketing	Syska, Gayle	Collateral Materials Coordinator	T120	60
Administration		Production Assistant	T6	55,28
Chief Executive Officer	Veldran, Thomas	Chief Executive Officer	T122	51
	Vezaa, Albert - officer			
Business Products Marketing	Weissberg, Richard	Production Manager/Infobase Applications	T217	53
Consumer Products Development	Wolper, Jerry	Programmer	T103A	32

Dear Computer Gamer,

Congratulations on this opportunity to be heard!!

Please accept our **free gift** and look over this software survey. Because we know you are a **fun-loving computer user**, we have enclosed for you, just to say thanks for answering our questions, a sheet of the remarkable **PRINT 'N WEAR! PERSONAL HEAT TRANSFER PAPER** from FOTO-WEAR!, INC. You can print out your own design or saying, in color or black and white, (add more color with oil-based crayons if you like), and iron it on your favorite T-shirt.

After filling out and sending back our survey, you will have the satisfaction of knowing that *someone is listening to your voice!* You will see software that is better suited to *your tastes* and *your ideas* of what software should be.

But before we begin, we'd like to provide some definitions so that we are all talking about the same things.

ROLE PLAYING GAMES (RPG) are defined (here) as computer adventures in which the player controls the members of a party, each of whom has individualized personalities and/or abilities. RPG's are usually set in fantasy or futuristic settings. Sir-Tech's *Wizardry*, Origin Systems' *Ultima*, and Electronic Arts' *Starflight* are well-known RPG's.

ACTION/ARCADE games are computer games where hand-eye coordination is essential for the success of repeated completion of screens/levels and the scoring of points. Mindscape's *Gauntlet* and Psygnosis' *Terrapods* are popular action/arcade games.

SPORTS are computer versions of sports competitions. They can be real or futuristic sports and show real as well as fictional contests. *Mean 18* by Accolade and *California Games* by Epyx are well-known sports games.

FLIGHT (VEHICLE) SIMULATORS are defined as computer games whose main objective is the operation and use of technologically advanced machinery, including but not limited to airplanes, helicopters, spaceships, and submarines. *Gunsight* by Microprose and *Flight Simulator II* by SubLogic are leading flight simulators.

STRATEGIC SIMULATORS are computer games in which the player attempts to control a mapped territory by strategic use of forces and armaments. SSI's *Rebel Charge* at Chickamunga and Broderbund's *Ancient Art of War* are prominent strategic simulators.

INTERACTIVE FICTION GAMES are text-based computer games, with or without graphics, in which the player solves puzzles and moves through the game's geography by inputting written commands. Infocom's *Zork* and Firebird's *The Pawn* are well-known examples of interactive fiction games.

GRAPHIC ADVENTURES are graphics-based computer games in which the player solves puzzles and moves through the game's geography by moving a character icon with a mouse or joystick or inputting written commands. Sierra's *King's Quest* and Activision's *Tass Times in Tone Town* are well-known graphic adventures.

We do realize that there may be some grey area across these definitions. However, for the sake of this survey, any game that goes across more than one category has been or should be placed in the one closest to the main thrust of the game.

BACKGROUND INFORMATION

Name _____ Age _____ Sex _____

(optional) Address _____

City _____ State _____ Zip _____

Telephone Number _____

Occupation or grade in school _____

Computer Type (the one used most for entertainment software)

____ Apple II series or compatible (specify model) _____ Apple IIgs _____ Apple Macintosh

____ Atari Home Computer _____ Atari ST _____ Commodore 64/128 _____ Commodore Amiga

____ IBM PC series or compatible (specify model) _____

____ other (please specify) _____

IBM and compatibles only:

Is your system 100% IBM compatible? ☐ yes ☐ no

What type of graphics board do you use? _____ N/A _____ IBM Color Card _____ IBM compatible with built-in board

____ EGA _____ MCGA _____ VGA _____ TGA _____ Hercules _____ other card _____ other software emulators

Does anyone in your household own a compact disc player? ☐ yes ☐ no

Does anyone in your household own a VCR? ☐ yes ☐ no

SOFTWARE TASTES AND EXPERIENCE

What computer magazines do you subscribe to or read more than three times a year? _____

How much time do you spend using your computer weekly?

☐ less than 2 hours ☐ 2-5 hrs ☐ 5-10 hrs ☐ 10-15 hrs ☐ 15-20 hrs ☐ more than 20 hours

What percent of that time is spent with entertainment software? _____

About how many entertainment software products do you own? _____

How many have you acquired in the last year? _____

How many of these: _____ did someone else buy for you? _____ did you copy from friends? _____ are freeware or public domain?

_____ are shareware? _____ did you buy yourself?

Of those computer games you've bought yourself, how many cost: under \$20.00? _____ \$20.00-50.00? _____ over \$50.00? _____

Please list your three current favorite computer games.

game

company (if known)

- 1 _____
- 2 _____
- 3 _____

Please list your five all-time favorite computer games.

game

company (if known)

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____

What are the three worst computer games you've ever played?

game

company (if known)

- 1 _____
- 2 _____
- 3 _____

What makes a computer game good? _____

Please rank the following types of computer games, where 1 is your favorite type, 2 is your second favorite, etc.; put an X next to any type you've never had any experience with.

_____ role playing games _____ action/arcade _____ sports _____ flight (vehicle) simulators _____ strategic simulators

_____ interactive fiction _____ graphic adventures

Please rate the following software companies on a scale of 1-5 where:

1 means you strongly like them

2 means you moderately like them

3 means you have very mixed feelings about them

4 means you moderately dislike them

5 means you strongly dislike them

or circle the X under NO OPINION or NEVER HEARD OF if appropriate.

	Strongly Like			Strongly Dislike			No Opinion	Never Heard Of
Accolade	1	2	3	4	5		X	X
Activision	1	2	3	4	5		X	X
Avalon Hill	1	2	3	4	5		X	X
Baudville	1	2	3	4	5		X	X
Broderbund	1	2	3	4	5		X	X
Cinemaware	1	2	3	4	5		X	X
Dark Star	1	2	3	4	5		X	X
Datasoft	1	2	3	4	5		X	X
Electronic Arts	1	2	3	4	5		X	X
Epyx	1	2	3	4	5		X	X
Firebird	1	2	3	4	5		X	X
FTL	1	2	3	4	5		X	X
Infocom	1	2	3	4	5		X	X
Interstel	1	2	3	4	5		X	X
MicroIllusions	1	2	3	4	5		X	X
Microprose	1	2	3	4	5		X	X
Mindscape	1	2	3	4	5		X	X
New World Computing	1	2	3	4	5		X	X
Origin Systems	1	2	3	4	5		X	X
RomQuest	1	2	3	4	5		X	X
Sierra On Line	1	2	3	4	5		X	X
Silicon Beach	1	2	3	4	5		X	X
Sir Tech	1	2	3	4	5		X	X
Spartacus Systems	1	2	3	4	5		X	X
Spectrum Holobyte	1	2	3	4	5		X	X
SSI (Strategic Simulations Inc.)	1	2	3	4	5		X	X
Strategic Studies Group (SSG)	1	2	3	4	5		X	X
Sublogic	1	2	3	4	5		X	X

CONCEPT OPINIONS

Please put a check next to any of the following entertainment software packages that you would buy if it were available at the typical cost of entertainment software (generally around \$40.00).

ROLE PLAYING GAMES

- ☐ *Wizardry V*—the next scenario in Sir-Tech's role playing series.
- ☐ *Battletech*—an RPG based on the popular series of board role playing games.
- ☐ *Watchmen*—an RPG based on the popular DC comics series.
- ☐ *Assassination Squad*—an RPG set in the present day revolving around a counterterrorist hit squad.
- ☐ *Superhero League of Hoboken*—a comedic RPG about a second-rate band of costumed crimefighters.
- ☐ *Doctor Who*—an RPG based on the time- and space-travelling British TV cult figure.
- ☐ *Ultima VI*—a sequel to Origin System's fantasy role playing series.
- ☐ *Chill*—an RPG based on the popular thrilling and chilling game of horror.
- ☐ *Heavy Metal*—an RPG whose object is to survive among the scum and the groupies of the rock scene and get your band a record contract.
- ☐ *Camelot*—an RPG based on the exploits of King Arthur and the Knights of the Round Table.
- ☐ *Bard's Tale IV*—the next story in EA's popular RPG series.
- ☐ *Might and Magic II*—the sequel to New World Computing's hit RPG.
- ☐ *Zork*—an RPG set in the universe created by Infocom's classic interactive fiction series.
- ☐ *Twilight 2000*—an RPG based on the popular board version by GDW.
- ☐ *King's Quest*—an RPG set in the universe created by Sierra's graphic adventure series.

- _____ *Newromancer*—an RPG of corporate intrigue and cybernetic derring-do based on the science fiction novel of William Gibson.
- _____ *Lord of the Rings*—an RPG set in Tolkien's Middle Earth.
- _____ *Starflight III*—the next futuristic RPG in the series by Electronic Arts.
- _____ *Phantasie IV*—the next in SSI's role playing series.
- _____ *Mod Squad*—an RPG based on the adventures of the classic TV series.
- _____ *Warhammer 40,000*—an RPG based on the popular board role-playing game.

other: _____

What are your three favorite choices in this category?

- 1 _____
- 2 _____
- 3 _____

ACTION/ARCADE

- _____ *Robocop*—an arcade style game based on the hit 1987 movie.
- _____ *Arkanoid II*—the sequel to the computer version of the hit coin-op arcade game.
- _____ *Dangerous Games*—an action-based game pitting the player against a series of real-life challenges such as mountain climbing and sky-diving.
- _____ *Car Wars*—a battle to the death in post-apocalyptic cars.
- _____ *Streets of the '50's*—cruise the town looking for drag races, avoiding the cops, and finding an occasional street fight.
- _____ *Gauntlet III*—another in the smash hit series of games from Mindscape.
- _____ *Dinosaur Wars*—an action game set in prehistoric times.
- _____ *Super Mario Brothers*—a challenging game based on the Nintendo and coin-op arcade games.
- _____ *Championship Tetris*—a more challenging and more exciting version of the new game from Spectrum Holobyte.
- _____ *Predator*—a challenge based on Schwarzenegger's sensational 1987 movie.
- _____ *Battletech*—an action game based on characters and settings in Fasa's role-playing universe.
- _____ *Thexder II*—a sequel to the phenomenal arcade smash by Sierra.
- _____ *Contra Force*—an action-packed shoot-'em-up Nicaraguan style.
- _____ *Anti-Terrorist Driving*—learn the techniques of high-speed chase driving, then hit the road against merciless adversaries.
- _____ *Terrorpods II*—the sequel to the popular action game by Psygnosis.
- _____ *Dark Castle III*—the next in Silicon Beach Software's series.
- _____ *S.W.A.T.*—an action game where you're a member of the elite police corps.
- _____ *Ghostbusters II*—the sequel to Activision's popular computer arcade game.
- _____ *Legend of Zelda*—a fantasy game of treasures, mazes, dungeons and monsters.
- _____ *Conan*—a series of survival challenges based on the popular figure of fiction.
- _____ *Untouchables*—a shoot-'em-up set in Capone's Chicago.
- _____ *Robot Chaos*—use your wits and skills to explore and shut down an out-of-control robot manufacturing plant.

other: _____

What are your three favorite choices in this category?

- 1 _____
- 2 _____
- 3 _____

SPORTS (NOTE: none of these titles really need an explanation thus they have none.)

- _____ *Five on Five Basketball* _____ *Bloodbowl Fantasy Football* _____ *Iron Man Triathlon* _____ *Jai Alai*
- _____ *Stanley Cup Hockey* _____ *Michael Jordan Basketball* _____ *Demolition Derby* _____ *Roman Gladiator Games*
- _____ *Wet and Wild Games* _____ *Mud Wrestling* _____ *Parachute Jumping* _____ *Rollerball* _____ *Real Stat Boxing*

other: _____

What are your three favorite choices in this category?

- 1 _____
- 2 _____
- 3 _____

Please rate the following software companies on a scale of 1-5 where:

1 means you strongly like them

2 means you moderately like them

3 means you have very mixed feelings about them

4 means you moderately dislike them

5 means you strongly dislike them

or circle the X under NO OPINION or NEVER HEARD OF if appropriate.

	Strongly Like			Strongly Dislike			No Opinion	Never Heard Of
Accolade	1	2	3	4	5		X	X
Activision	1	2	3	4	5		X	X
Avalon Hill	1	2	3	4	5		X	X
Baudville	1	2	3	4	5		X	X
Broderbund	1	2	3	4	5		X	X
Cinemaware	1	2	3	4	5		X	X
Dark Star	1	2	3	4	5		X	X
Datasoft	1	2	3	4	5		X	X
Electronic Arts	1	2	3	4	5		X	X
Epyx	1	2	3	4	5		X	X
Firebird	1	2	3	4	5		X	X
FTL	1	2	3	4	5		X	X
Infocom	1	2	3	4	5		X	X
Interstel	1	2	3	4	5		X	X
MicroIllusions	1	2	3	4	5		X	X
Microprose	1	2	3	4	5		X	X
Mindscape	1	2	3	4	5		X	X
New World Computing	1	2	3	4	5		X	X
Origin Systems	1	2	3	4	5		X	X
RomQuest	1	2	3	4	5		X	X
Sierra On Line	1	2	3	4	5		X	X
Silicon Beach	1	2	3	4	5		X	X
Sir Tech	1	2	3	4	5		X	X
Spartacus Systems	1	2	3	4	5		X	X
Spectrum Holobyte	1	2	3	4	5		X	X
SSI (Strategic Simulations Inc.)	1	2	3	4	5		X	X
Strategic Studies Group (SSG)	1	2	3	4	5		X	X
Sublogic	1	2	3	4	5		X	X

CONCEPT OPINIONS

Please put a check next to any of the following entertainment software packages that you would buy if it were available at the typical cost of entertainment software (generally around \$40.00).

ROLE PLAYING GAMES

- ☐ *Wizardry V*—the next scenario in Sir-Tech's role playing series.
- ☐ *Battletech*—an RPG based on the popular series of board role playing games.
- ☐ *Watchmen*—an RPG based on the popular DC comics series.
- ☐ *Assassination Squad*—an RPG set in the present day revolving around a counterterrorist hit squad.
- ☐ *Superhero League of Hoboken*—a comedic RPG about a second-rate band of costumed crimefighters.
- ☐ *Doctor Who*—an RPG based on the time- and space-travelling British TV cult figure.
- ☐ *Ultima VI*—a sequel to Origin System's fantasy role playing series.
- ☐ *Chill*—an RPG based on the popular thrilling and chilling game of horror.
- ☐ *Heavy Metal*—an RPG whose object is to survive among the scum and the groupies of the rock scene and get your band a record contract.
- ☐ *Camelot*—an RPG based on the exploits of King Arthur and the Knights of the Round Table.
- ☐ *Bard's Tale IV*—the next story in EA's popular RPG series.
- ☐ *Might and Magic II*—the sequel to New World Computing's hit RPG.
- ☐ *Zork*—an RPG set in the universe created by Infocom's classic interactive fiction series.
- ☐ *Twilight 2000*—an RPG based on the popular board version by GDW.
- ☐ *King's Quest*—an RPG set in the universe created by Sierra's graphic adventure series.

FLIGHT (VEHICLE) SIMULATORS

- _____ *Stealth Bomber*—pilot the high-tech aircraft into unfriendly territory to destroy your objective.
- _____ *Future Sub Battle*—conduct missions around the world in a high-tech submarine of the future.
- _____ *Ferrari Racing*—take to the empty streets at night in your classy machine.
- _____ *Blue Angels Daredevil Flying*—learn and perform loops, spins, and other aerobatic stunts along with a group of top-notch Navy pilots.
- _____ *Space Shuttle*—operate a NASA space shuttle through all aspects of a mission.
- _____ *Star Trek*—your chance to be Captain Kirk in the true simulator based on the U.S.S. Enterprise.
- _____ *Space Dogfights*—fly against a friend or the computer in a laser, phaser, and photon shootout.
- _____ *TARDIS Simulator*—travel through time and space like Dr. Who and save the universe.
- _____ *Futuristic HoverTank*—float gracefully above a wide variety of alien landscapes.
- _____ *Roller Coaster Construction Set*—design your own roller coaster and your own car for the thrill of a lifetime experience.
- _____ *Hydrofoil*—engage in exercises in key military hot spots—the Middle East, Southeast Asia, Central America.

other: _____

What are your three favorite choices in this category?

1 _____

2 _____

3 _____

STRATEGIC SIMULATORS

- _____ *The Civil War*—become Lincoln or Davis in a sweeping simulation of the War Between the States.
- _____ *Defender of the Crown II*—the sequel to Cinemaware's hit computer game.
- _____ *Vietnam*—a serious simulation of the century's most controversial conflict.
- _____ *Rat Patrol*—tactical armored combat during World War II's battles in North Africa.
- _____ *Reclamation*—restore the ecology after the destruction caused by a mining operation.
- _____ *Hostile Takeover*—hot and heavy Wall Street action sets the stage for buyouts and takeovers.
- _____ *Twilight 2000*—a tactical computer version of GDW's popular board game.
- _____ *Islamic Jihad*—rise up in a rebellion of religious fanaticism and crush capitalistic society in the modern Middle East.
- _____ *Napoleon and Wellington*—grand simulation of the battles leading up to and including Waterloo.
- _____ *Kinetic Warrior Force 2000*—create and place your legions of cyborg and android warriors in this battle for the future.
- _____ *The Sun Never Sets*—the British Empire and her competitors race to colonize the new world.

other: _____

What are your three favorite choices in this category?

1 _____

2 _____

3 _____

INTERACTIVE FICTION

- _____ *Shogun*—an interactive story based on James Clavell's bestseller.
- _____ *Hitchhiker's II*—the sequel to Infocom's hit *The Hitchhiker's Guide to the Galaxy*.
- _____ *The Guild of Thieves II*—sequel to the popular interactive tale by Firebird.
- _____ *Initiation Day*—an Animal House like comedy about the rowdy adventures of a college fraternity.
- _____ *Western*—a classic good-guy sheriff vs. the outlaws adventure.
- _____ *Robin Hood*—an interactive version of the tales of the legendary Robin Hood.
- _____ *Camelot*—a tale of adventure set in the court of King Arthur.
- _____ *Watchmen*—an interactive story based on the DC Comics characters.
- _____ *Titanic*—a fictional adventure set aboard the Titanic on the night of her ill-fated sinking.
- _____ *Zork IV*—the next in Infocom's series of interactive fiction stories.
- _____ *Star Trek: The Next Generation*—an interactive adventure based on the new hit TV series.
- _____ *The Interactive Bible*—a lighthearted spoof of bible stories and other religious legends.
- _____ *Dracula*—an adventure based on the legendary Count.
- _____ *What They Don't Teach You at Harvard Medical School*—a story of "playing doctor" satirizing Reality Technology's *What They Don't Teach You at Harvard Business School*.

____ *Leather Goddesses of Phobos II*—the sequel to Infocom's hit interactive comedy.

other: ____ *The Pawn II*—the sequel to Firebird's popular interactive story.

What are your three favorite choices in this category?

- 1 _____
2 _____
3 _____

GRAPHIC ADVENTURES

____ *King's Quest IV*—the next in Sierra's popular graphic adventure series.

____ *Leather Goddesses of Phobos*—a graphic version of the sequel to Infocom's interactive comedy hit.

____ *Leisure Suit Larry II*—the sequel to Sierra's successful adult adventure.

____ *Conan*—an adventure based on the legendary figure of literary and movie fame.

____ *Teenage Mutant Ninja Turtles*—a graphic adventure based on the characters in Eastman and Laird's comic books.

____ *Robin Hood*—a graphic adventure set in Sherwood Forest.

____ *Tass Times in Tone Town II*—the sequel to Activision's popular new wave adventure.

____ *The Far Side*—an adventure based on the zany cartoons of Gary Larson.

____ *Star Trek: The Next Generation*—an adventure based on the new television series.

____ *Hacker III*—the next in the series of Activision's adventures.

____ *Last Tango in Paris*—an adult graphic adventure reminiscent of the popular film.

____ *Bloom County*—an adventure set in the cartoon strip of Berke Breathed.

____ *Cyberpunk*—an adventure of space travel, designer drugs, mindless violence, rock n roll, and intelligent computers.

____ *Police Quest II*—the next adventure, sequeling the popular game by Sierra.

____ *A Hundred Years of Solitude*—an adventure based on the prize winning novel by Garcia-Marquez.

____ *Calvin and Hobbes*—a graphic adventure story based on the comic strip characters.

____ *Grimm's Fairy Tales*—some of your favorite childhood fairy tales brought to life in a graphic adventure.

____ *American Flagg*—a graphic adventure of the comic book series created by Howard Chaykin.

____ *Street Punk*—a street gang adventure based on the 1988 film Colors.

____ *Badger*—an adventure based on the popular comic book from First Comics.

other: ____

What are your three favorite choices in this category?

- 1 _____
2 _____
3 _____

What are your three favorite choices overall?

- 1 _____
2 _____
3 _____

When complete, please return the survey in the enclosed self-addressed envelope. Thank you for your time and opinions, and enjoy your PRINT 'N' WEAR!

LAH Research
369 Massachusetts Ave.
Suite 205
Arlington, MA 02174

CONCEPT SURVEY PROFILE

	<u>SURVEY MAILING</u>	<u>SURVEY RETURNS</u>	<u>RETURN RATE (%)</u>
TOTAL BASE	2,000 %	386 %	19.3

Name Source

New World Computing	3	5	29.8
Activision	11	12	21.1
Infocom	86	83	18.7

Sex

Male	83	83	19.4
Female	17	17	18.6

Geographic Region

Northeast	25	27	19.4
North Central	21	15	13.9
South	26	24	16.7
West	28	34	22.7

	<u>OVERALL</u> <u>FAVORITE</u> 386 %	<u>CATEGORY</u> <u>FAVORITE</u> 386 %	<u>CATEGORY</u> <u>SELECTION</u> 386 %
<u>Interactive Fiction</u>			
Zork IV	13	35	56
Hitchhiker's GG II	10	35	56
Leather Goddesses II	4	23	43
Star Trek: Next Gen.	8	23	40
Camelot	2	11	32
Initiation Day	1	10	23
Robin Hood	1	9	27
Titanic	1	9	20
Dracula	1	8	25
Don't Teach/ Harvard Med. School	2	8	25
<u>Graphic Adventures</u>			
The Far Side	4	26	46
Star Trek: Next Gen	7	22	37
Leather Goddesses	5	19	40
Bloom County	4	18	34
Leisure Suit Larry II	4	15	29
King's Quest IV	3	15	27
Calvin & Hobbes	4	12	27
Conan	2	10	20
Robin Hood	1	9	23
Teenage Mutant Ninja Turtles	2	9	21

	<u>OVERALL</u> <u>FAVORITE</u> 386 %	<u>CATEGORY</u> <u>FAVORITE</u> 386 %	<u>CATEGORY</u> <u>SELECTION</u> 386 %
<u>Role Playing Games</u>			
Zork RPG	8	28	54
Bard's Tale IV	11	21	41
Ultima VI	12	20	40
Lord of the Rings RPG	4	19	45
Doctor Who	5	15	25
Starflight III	4	13	28
Camelot RPG	2	11	37
Wizardry V	4	10	33
Might & Magic II	3	10	28
Chill RPG	2	8	22
<u>Strategic Simulations</u>			
Civil War	2	17	25
Defender of Crown II	1	17	24
Vietnam	1	16	25
Kinetic Warriorforce			
2000	1	13	20
Twilight 2000	1	11	17
Rat Patrol	1	10	17
The Sun Never Sets	2	10	17
Hostile Takeover	2	8	14
Napoleon & Wellington	1	7	14
Islamic Jihad	1	5	8
<u>Action/Arcade Games</u>			
Robocop	3	22	37
Legend of Zelda	2	18	32
Gauntlet III	1	15	27
Predator	2	13	27
Super Mario Bros.	1	12	23
Car Wars	1	11	25
Untouchables	1	8	24
Dark Castle III	2	8	16
Dangerous Games	1	7	20
Streets of the 1950s	1	7	16

	<u>OVERALL</u> <u>FAVORITE</u>	<u>CATEGORY</u> <u>FAVORITE</u>	<u>CATEGORY</u> <u>SELECTION</u>
	386 %	386 %	386 %
<u>Sports</u>			
Roman Gladiator Games	--	20	32
Wet & Wild Games	1	14	25
Demolition Derby	2	13	22
Stanley Cup Hockey	3	12	19
Blood Bowl Fantasy Football	1	11	22
5 on 5 Basketball	1	10	19
Parachute Jumping	1	9	21
Rollerball	--	9	18
Mud Wrestling	--	9	17
Michael Jordan Basketball	1	8	17
<u>Flight Simulators</u>			
Star Trek	10	37	49
Ferrari Racing	2	20	32
Roller Coaster Constr. Set	4	18	28
Space Shuttle	3	17	30
Stealth Bomber	1	15	30
Tardis Simulator	3	14	20
Hydrofoil	--	11	23
Future Battle Sub.	2	10	23
Blue Angels Daredevils	1	9	21
Futuristic Hovertank	--	7	19

COMPUTER MAGAZINESREAD AT LEAST THREE TIMES PER YEAR

Product Base	<u>TOTAL BASE</u>		<u>RESPONDING BASE</u>
	386 #	386 %	312 %
<u>Magazine</u>			
A+	63	16.3	20.2
Compute	57	14.8	18.3
PC Magazine	51	13.2	16.3
Compute's Gazette	49	12.7	15.7
Family/Home Office Computing	48	12.4	15.4
Incider	45	11.7	14.4
Run	43	11.1	13.8
Computer Gaming World	40	10.4	12.8
Byte	40	10.4	12.8
Commodore	39	10.1	12.5
PC World	24	6.2	7.7
Questbuster	23	6.0	7.4
Ahoy	21	5.4	6.7
Personal Computing	20	5.2	6.4
MAC User	20	5.2	6.4
Computer Shopper	16	4.1	5.1
MAC World	15	3.9	4.8
Nibble	14	3.6	4.5
PC Resource	12	3.1	3.8
Antic	10	2.6	3.2
Start	10	2.6	3.2
Info	10	2.6	3.2
ST Log	9	2.3	2.9
Amiga World	9	2.3	2.9
Dr. Dobbs Tech. Journal	8	2.1	2.6
Computer Languages	8	2.1	2.6
80 Micro	7	1.8	2.2
PC Week	7	1.8	2.2
PC Tech. Journal	7	1.8	2.2
Amazing Computers	6	1.6	1.9
None	41	10.6	---
No Answer	33	8.5	---

CURRENT FAVORITE ENTERTAINMENT SOFTWARE

Top Three Titles Yielded 239 Titles

Respondent Base	386 #	386 %	
Zork Series(4)	110	28.5	Infocom
Bard's Tale Series (3)	64	16.6	Electronic Arts
Ultima Series (3)	58	15.0	Electronic Arts
Hitchhiker's Guide...	36	9.3	Infocom
Wizardry Series (2)	25	6.5	Sir Tech
Kings Quest Series (2)	23	6.0	Sierra
Might & Magic	21	5.4	New World
Space Quest Series (2)	19	4.9	Sierra
Nord & Bert Couldn't...	18	4.7	Infocom
Starflight	18	4.7	Electronic Arts
Gunship	18	4.7	Micro Prose
Mean 18 Golf	15	3.9	Accolade
Leather Goddesses...	12	3.1	Infocom
Flight Simulator II	12	3.1	Sub Logic
Jeopardy	12	3.1	Share Data
Hardball	11	2.8	Accolade
Leisure Suit Larry	11	2.8	Sierra
Dungeon Master	11	2.8	FTL
Police Quest	10	2.6	Sierra
Wishbringer	10	2.6	Infocom
Where in the USA/ Carmen D.	10	2.6	Broderbund
No Answer	14	3.6	

WHAT MAKES A GOOD COMPUTER GAME?

Respondent Base	386	386
	#	%

Game Play

Storyline: Dimension & Depth	91	23.6
Challenge	80	20.7
Ease of Use/Learning/Starting	73	18.9
Puzzles/Logical Solutions	62	16.1
Action	54	14.0

Good Sounds	45	11.7
Always Different	42	10.9
Realism	39	10.1
Levels of Play	33	8.5
Strategy	32	8.3

Interactive Characters	31	8.0
Replayability	25	6.5
Playability of Game	24	6.2
Originality	23	6.0
Increasing Difficulty	20	5.2

Humor	20	5.2
Objective	20	5.2
Clues/Hints (On Line)	16	4.1
Fun	15	3.9
Balance Between Action & Strategy	6	1.6

Price	3	.8
-------	---	----

Graphics

Good	146	37.8
Colorful	15	3.9
Detailed	11	2.8
Clean	6	1.6

Controls

Responsive	14	3.6
Versatility	5	1.3

Documentation

Clear	16	4.1
Thorough	14	3.6
Short	7	1.8

No Answer	31	8.0
-----------	----	-----

COMPUTER GAME THEMES AND RESPONDENT SOURCE
(Indexed)

By the Leading Systems Owned by Respondents

(The three leading systems represented 85%
of the systems owned)

	Commodore <u>64/128</u>	Apple II <u>Series</u>	IBM + <u>Compatibles</u>
<u>Computer Game Themes</u>			
Action/Arcade	1.81	.74	.66
Sports Games	2.14	.43	.93
Flight Simulators	1.3	.70	1.17
Strategic Simulations	.48	.22	1.41
Role Playing Games	.95	1.43	.78
Graphic Adventures	.86	1.13	1.12
Interactive Fiction	.71	.91	1.27
<u>Respondent Source</u>			
Activision	3.00	.09	.58
New World Computing	1.45	1.39	.77
Infocom	.68	1.09	1.10

FREQUENCY OF PLAY AND AMOUNT OF
ENTERTAINMENT SOFTWARE ACQUIRED
 (Indexed)

By Respondents within Favorite Computer Theme Category

HOURS PER WEEK SPENT ON ENTERTAINMENT SOFTWARE:

# HOURS	ACTION/ ARCADE	SPORTS GAMES	FLIGHT SIMUL	STR SIMUL	ROLE PLAYING GAMES	GRAPH ADV	INTER FICTION
0 - 2	.82	.71	.71	1.94	.41	.94	1.53
2 - 5	.93	1.72	1.10	.97	.72	1.21	1.00
6 - 10	.88	.60	1.44	.88	1.08	.88	1.04
11 - 15	1.29	1.36	.57	.79	1.57	1.00	.57
15 - +	.80	.40	.80	---	1.60	.80	.80

AMOUNTS OF ENTERTAINMENT SOFTWARE ACQUIRED IN LAST YEAR:

# PIECES	ACTION/ ARCADE	SPORTS GAMES	FLIGHT SIMUL	STR SIMUL	ROLE PLAYING GAMES	GRAPH ADV	INTER FICTION
1 - 3	.83	.33	.50	1.33	.33	.92	1.75
4 - 6	.86	.91	1.27	1.27	.95	1.00	1.18
7 - 10	.71	.83	1.00	1.17	1.04	1.00	.96
11 - 15	1.08	1.00	.33	.92	1.42	1.33	.50
16 - 20	1.00	1.20	.40	1.10	1.00	1.10	.90
21 - 30	1.25	1.50	1.50	---	1.00	.63	.75
30 - +	1.43	1.71	.57	1.57	1.29	.71	.86

FAVORITE COMPUTER GAME THEMES

(Indexed)

By Source of Respondent

	<u>Activision</u>	<u>New World</u>	<u>Infocom</u>
Action/Arcade	2.07	1.36	.79
Sports	3.60	.70	.50
Flight Simulators	2.13	----	.88
Strategic Simulations	.43	----	1.14
Role Playing Games	.73	2.18	.98
Graphic Adventures	.45	----	1.27
Interactive Fiction	.14	----	1.14

THE DESERT SURVIVAL PROBLEM

The situation described in this problem is based on over 2000 actual cases in which men and women lived or died depending upon the survival decisions they made. Your "life" or "death" will depend upon how well your group can share its present knowledge of a relatively unfamiliar problem so that the team can make decisions that will lead to your survival.

It is approximately 10:00 a.m. in mid-July, and you have just crash-landed in the Sonora Desert in southwestern United States. The light twin-engine plane, containing the bodies of the pilot and the co-pilot, has completely burned. Only the air frame remains. None of the rest of you have been injured.

The pilot was unable to notify anyone of your position before the crash. However, ground sightings, taken before you crashed, indicated that you are 65 miles off the course that was filed in your VFR Flight Plan. The pilot had indicated before you crashed that you were approximately 70 miles south-southwest from a mining camp which is the nearest known habitation.

The immediate area is quite flat and, except for occasional barrel and saguaro cacti, appears to be rather barren. The last weather report indicated that the temperature would reach 110 degrees, which means that the temperature within a foot of the surface will hit 130 degrees. You are dressed in lightweight clothing — short-sleeved shirts, pants, socks, and street shoes. Everyone has a handkerchief. Collectively, your pockets contain \$2.83 in change, \$85.00 in bills, a pack of cigarettes, and a ball point pen. ?

THE PROBLEM

Before your plane caught fire, your group was able to salvage the 15 items listed on the next page. Your task is to rank these items according to their importance to your survival, starting with "1" (the most important) to "15" (the least important).

Assume that the number of survivors is the same as the number on your team and that the team has agreed to stick together.

ITEMS		Step 1 Your Individual Ranking	Step 2 The Team's Ranking	Step 3 Survival Expert's Ranking	Page 2 Difference Between 1 and 3		Difference Between 2 and 3
A, B	flashlight (4-battery size)	5	5	4	1	1	
C	jackknife	7	4	6	1	2	
B	sectional air map of the area	13	13	12	1	1	
	plastic raincoat (large size)	6	11	7	1	4	
B	magnetic compass	14	14	11	3	3	
	compress kit with gauze	11	8	10	1	2	
C	.45 caliber pistol (loaded)	8	10	8	0	2	
A	parachute (red and white)	3	1	5	2	4	
C	bottle of 1000 salt tablets	2	3	15	13	12	
C	1 quart water per person	1	2	3	2	1	
C	book: "Edible Animals of the Desert"	9	12	13	4	1	
B	1 pair sunglasses per person	15	15	9	6	6	
	2 quarts 180 proof vodka	10	7	14	4	7	
C	1 topcoat per person	12	9	2	10	7	
A	a cosmetic mirror	4	6	1	3	5	
TOTALS (the lower the better)					52	58	
					Yours	Team's	

A = signalling

B = travel

C = survival

stay → 80% of rescue in 24 hours

EXHIBIT E

NON-COMPETITION AGREEMENT

THIS AGREEMENT is made this 6th day of May, 1986, by and among Activision, Inc., a California corporation ("Activision"), Infocom, Inc., a Massachusetts corporation ("Infocom") and STEVEN MERETZKY (the "Shareholder"), a shareholder of Infocom.

RECITALS:

A. Infocom is presently engaged in the United States, Canada and Western Europe (the "Restricted Area") and elsewhere in the business of developing, manufacturing, marketing and supporting interactive fiction computer software for entertainment and educational uses (the "Restricted Business").

May 2
B. Pursuant to an Agreement and Plan of Merger dated as of April 2, 1986 (the "Merger Agreement"), a newly-formed subsidiary of Activision will be merged with and into Infocom (the "Merger"), with Infocom remaining as the surviving corporation and becoming a wholly-owned subsidiary of Activision. Upon the Merger, shares of Infocom Common Stock will be converted into shares of the Common Stock of Activision, and the Shareholder will receive shares of Activision Common Stock.

C. In consideration of and as an inducement to Activision to enter into the Merger Agreement, and as a condition to the obligations of Activision set forth in the Merger Agreement, the Shareholder, intending to be bound hereby, has agreed to execute this agreement.

NOW, THEREFORE, the parties hereto agree as follows:

1. The Shareholder agrees that for a period of eighteen (18) months after the effective date of the Merger (provided that the Shareholder either (a) is employed for such period by Infocom or Activision, or (b) voluntarily terminates his employment by Infocom or Activision (unless (i) such voluntary termination results from a fundamental change in the services to be performed by or responsibilities of the Shareholder as an employee of Activision or any of its subsidiaries, including Infocom, it being agreed (by way of example only) that an assignment that the shareholder not engage in the development of interactive fiction computer software, unless agreed to by the Shareholder, shall constitute such a fundamental change, or from a change or series of changes materially decreasing the Shareholder's compensation, and (ii) following such termination neither Activision nor any of its subsidiaries shall continue to pay salary to the Shareholder at a rate in excess of 50% of Shareholder's salary prior to any aforementioned change), or

(c) if involuntarily terminated, is terminated for any or all of incompetence, excessive and habitual intoxication (whether due to alcohol or any other substance) or insubordination, the Shareholder will not directly or indirectly, whether as an owner, partner, shareholder, employee or consultant, engage anywhere in the Restricted Area in the Restricted Business, and will not undertake or accept employment or provide services of any nature to, or become a director or officer of, or otherwise become associated in any manner with, any person, firm, corporation or other organization other than Activision or any of its subsidiaries, including Infocom, which is engaged in the Restricted Business in the Restricted Area; provided, however, that notwithstanding the foregoing, Shareholder may (i) own not in excess of 5% of the equity securities of such a corporation other than Activision if such equity securities (at the time acquired by the Shareholder) are listed for trading on a national stock exchange or traded in the over-the-counter market, quotations of which are published by NASDAQ, and (ii) may be employed by or act as a consultant to a subsidiary or division of a corporation engaged in the Restricted Business so long as such subsidiary or division is not engaged in the Restricted Business and such employment or consulting is not with respect to the Restricted Business.

2. The covenants contained in this Agreement shall be construed as a series of separate covenants, one for each county in each of the states of the United States of America and one for each province of Canada. If, in any judicial proceeding, a court of competent jurisdiction shall refuse to enforce any of the separate covenants deemed included in this Agreement, then the obligations imposed upon Shareholder by such covenants shall be deemed reduced in magnitude or degree by the minimum magnitude or degree necessary to make such covenants enforceable.

3. The Shareholder further agrees, during the period of the covenant set forth in Paragraph 1 above, not to directly or indirectly, for himself or for any other party, (i) disclose or use, except in connection with his employment by Activision or any of its subsidiaries, including Infocom, or as expressly authorized by Activision, any secret or confidential information known or acquired by him as an employee of Activision or its subsidiaries so long as such information does not otherwise become known or available to the public (except by means of persons or entities controlled by Shareholder or with whom Shareholder cooperates), or (ii) induce or attempt to persuade any person who on the date hereof is, or subsequent thereto becomes, an employee of Activision or its subsidiaries to terminate his relationship with any such company.

4. The undersigned Shareholder agrees that the covenants provided for in Paragraph 1 hereof, including the term and the geographical area encompassed therein, are necessary and reasonable in order to protect Activision and Infocom, as the surviving corporation in the Merger, in the conduct of their businesses and the utilization of the assets, tangible and intangible, including the goodwill of Infocom, so acquired by virtue of the Merger.

5. It is expressly agreed between the parties that monetary damages would be inadequate to compensate Activision or Infocom for any breach by the undersigned of his covenants and agreements set forth herein. Accordingly, Shareholder agrees and acknowledges that any such violation or threatened violation will cause irreparable injury to Activision and Infocom and that, in addition to any other remedies which may be available, Activision and Infocom shall be entitled to obtain injunctive relief against the threatened breach of this Agreement or the continuation of any such breach by the Shareholder without the necessity of proving actual damages.

6. No provision hereof may be waived, altered or amended, except by a written instrument signed by all of the parties hereto. This Agreement shall be governed, construed and enforced in accordance with the laws of the Commonwealth of Massachusetts.

7. This Agreement may be executed in counterpart copies, all of which when taken together shall be deemed to constitute one and the same original instrument.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

ACTIVISION, INC.

By: 

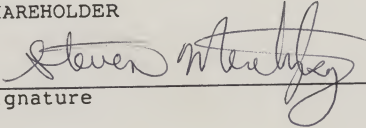
Title: Chairman

INFOCOM, INC.

By: 

Title: President

SHAREHOLDER


Signature

Steven Meretzky
Typed or Printed Name

INFOCOM

Steve:

The attached is in connection
with the merger and needs your
signature.

Could you please get it back
to me ASAP.

Thank you.

Linda C.

INFOCOM

TO: Dave Lebling, Steve Meretzky ✓
FROM: Joel Berez JMB
SUBJECT: Job Description
DATE: May 6, 1986

Attached for your information is the Senior Product Designer position description.

lsc

INFOCOM

POSITION DESCRIPTION

Position Title: Senior Product Designer

Job Code:

Position Level: Technical Exempt

Date: 5/6/86

Primary Function:

Responsible for working independently or with limited supervision on complex tasks or multiple tasks. Responsible for conceptualizing, designing, and implementing products. Must be proficient both in product design, implementation, and documentation.

Principal Duties and Responsibilities:

1. Exercising primary creative control on product design and implementation.
2. Following projects through design, implementation, and debugging.
3. Providing technical and creative leadership to other product designers.
4. Providing creative input and advice to marketing in the areas of packaging, documentation, promotion, etc.

Knowledge and Experience:

1. Four to ten years technical experience in the areas of computer science or programming.
2. Proven ability in technical and/or creative leadership. Demonstrate high level of innovation.
3. Ability to interact effectively with all levels of personnel.

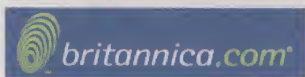
Educational Requirements:

Thorough knowledge of computer software and/or Infocom's interactive fiction development system, either through course work or practical training. College degree is essential. MS level, preferred.

Approved by: _____

Date: _____

Joel R. Berry
5/6/86



Technology Review

Computing's Johnny Appleseed

January/February 2000

by M. Mitchell Waldrop

Often, says Tim Anderson, thinking back to the mid-1970s and his time as a student at MIT's Laboratory for Computer Science, you'd walk into the terminal room and there he'd be: Professor J.C.R. Licklider, typing code with his own 10 fingers.

This took some getting used to. Lick, as everyone called him, wasn't a hacker, but an absent-minded-professor-type in his 60s. "He'd sit there with a bottle of Coke and a vending machine brownie as if that were a perfectly satisfactory lunch," recalls Anderson, who is now the chief technology officer at an Internet startup known as Offroad Capital. "He had these funny colored glasses with yellow lenses; he had some theory that they helped him see better."

Anderson wasn't sure what Lick was working on--something to do with making computer code as intuitive as ordinary conversation, and as easy as drawing a sketch. The programs he wrote weren't so hot, but that almost didn't matter. For Lick the important thing was imagining the future--and an astonishing amount of what we now take for granted owes its origins to his work. He would hold forth for hours in his wry Missouri accent, spinning visions of graphical computing, digital libraries, online banking and e-commerce, computers with megabytes of memory, software that would live on the network and migrate wherever it was needed--all this 10 years before the Macintosh, 20 years before the popularization of the Web.

What Lick never got around to mentioning was that he had done as much as anyone on earth to make such wonders possible. In fact, the big, rumples guy in the corner office had laid the foundations for time-sharing, point-and-click interfaces, graphics and the Internet--virtually all of modern computing. "He was clearly the father of us all," says Anderson. "But you'd never know it from talking to him."

Mind Meets Machine

Such modesty was bred into Licklider at an early age. Back in St. Louis, where he was born in 1915, a self-satisfied man was said to have too much "side"--a reference to the fatty flanks of a hog. And little Robnett, as Joseph Carl

Robnett Licklider was known as a boy, had been raised to think "side" was unseemly. Every evening from the time he was 5, it had been his duty and honor to take the arm of his maiden aunt, escort her to the dinner table, and hold out her chair. Even as an adult, Lick was a remarkably courteous man who rarely raised his voice in anger and who found it almost physically impossible to remain seated when a woman entered the room.

A happy, energetic boy with a lively sense of fun, Licklider early on displayed an insatiable curiosity and a love of all things technological--especially cars. At 15, he bought an old junker and took it apart again and again, trying to figure out its inner workings. For years thereafter, he refused to pay more than \$50 for a car; whatever shape it was in, he could fix it up and make it go.

At Washington University in St. Louis, he wanted to major in everything--and almost did. He graduated in 1937 with a triple degree in physics, math and psychology, with particular interest in deciphering the ultimate gadget: the brain. For his doctoral dissertation at the University of Rochester, he made the first maps of neural activity on the auditory cortex, pinpointing the regions crucial to our ability to hear musical pitch.

Ironically, this passion for psychology would be central to Lick's pathbreaking work in computing. Most computer pioneers came to the field in the 1940s and 1950s with backgrounds in math or electrical engineering, leading them to focus on gadgetry: making the machines bigger, faster and more reliable. But Lick's study of neuroscience left him with a deep scientific appreciation for the human capacity to perceive, to adapt, to make choices, and to create new ways of tackling problems. To Lick, these abilities were every bit as subtle and as worthy of respect as the automated execution of a series of instructions. And that's why to him, the real challenge would always lie in adapting computers to the humans who use them, exploiting the strengths of each.

Lick's instincts in this direction were apparent by 1942, when he joined Harvard's Psycho-Acoustics Laboratory. The Army Air Force was funding a team of psychologists at that lab to attack the problem of noise. The United States had just entered World War II, and aircraft crews were finding it difficult to function amid the overwhelming din of the engines. Lick devised a method for artfully distorting radio transmissions to emphasize consonants over vowels and thus make words stand out against a background of radio static and mechanized cacophony. Already, he was shaping the technology to fit the human, not the reverse.

That sensibility asserted itself even more after 1950, when Lick moved to MIT. Almost immediately, he got caught up in Project SAGE--a crash program to create a computer-based air-defense system against Soviet long-range bombers. The computer in SAGE was Whirlwind, which had been under development at MIT since 1944. Other early computers, such as ENIAC, had started out as giant calculators, with an operating style to match: You entered the numbers and eventually got back a printout with the answer. This came to be known as batch-processing. Whirlwind, by contrast, had started out as a flight simulator

and had evolved into the world's first real-time computer: It would try to respond instantly to whatever the user did at the console. The challenge was to prove that a computer could take the data coming in from a new generation of air-defense radars and display the results rapidly in a meaningful form.

The project succeeded. Although high-flying, fast-moving ICBMs had made the air-defense system obsolete by the time it was finally deployed in 1958, SAGE nevertheless served as a model for the interactive, real-time computers that followed—including modern personal computers. Lick headed SAGE's human-factors team, and he saw the project as an example of how machines and humans could work in partnership. Without computers, humans couldn't begin to integrate all that radar information. Without humans, computers couldn't recognize the significance of that information, or make decisions. But together—ah yes, together...

By 1957, the year he left MIT for the nearby consulting firm Bolt Beranek and Newman, that train of thought was leading Lick down strange new paths. That spring and summer, he kept track of what he actually did during the day—with shocking results. "About 85 percent of my 'thinking' time was spent getting into a position to think, to make a decision, to learn something I needed to know," he later wrote. He concluded that his decisions on what work to attempt "were determined to an embarrassingly great extent by considerations of clerical feasibility, not intellectual capability."

Computers, he believed, would rescue the human mind from its enslavement by mundane detail. Human and machine were destined to unite in an almost mystical partnership, with computers handling rote algorithms while people provided the creative impulses. The hope, he said, was that "the resulting partnership will think as no human brain has every thought and process data in a way not approached by the information-handling machines we know today." Lick found this vision of human-computer symbiosis so compelling that standard psychology could no longer compete. "Any psychologist is crazy to keep on working with people if he has access to a computer," he said, only partly in jest.

And so he switched fields. In a 1960 paper called "Man-Computer Symbiosis," published in the *IRE Transactions on Human Factors in Electronics*, Licklider formulated a new vision of computing. He described a machine that humans could relate to in the manner of "a colleague whose competence supplements your own"—a friend who could help when the problems got too hard to think through in advance. Such problems "would be easier to solve" he wrote, "and they could be solved faster, through an intuitively guided trial-and-error procedure in which the computer cooperated, turning up flaws in the reasoning or revealing unexpected turns in the solution."

Much easier said than done. Real-time computers were still a rarity in 1960, and far too expensive for individual use. Therefore, Lick concluded, the most efficient way to use this technology was to have the computer "divide its time among many users." This was not an original idea; such "time-sharing systems" were already under development at MIT and elsewhere. But Lick, never one to

hold his imagination in check, followed that notion to its logical conclusion: He described an online "thinking center" that would "incorporate the functions of present-day libraries." He foresaw "a network of such centers, connected to one another by wide-band communications lines and to individual users by leased-wire services." Any similarity to today's Internet is not a coincidence. (To read Licklider's seminal paper, go to www.memex.org/licklider.html.)

Networks would allow computers to communicate with one another. But Lick also saw a desperate need for better ways for humans to interact with computers. Punch cards and printouts were, he wrote, hopelessly impoverished relative to human communication via sight, sound, touch and even body language. His proposed solution: a desk-sized console that would function much like today's personal computer, equipped with voice and handwriting recognition. He described a display surface "approaching the flexibility and convenience of the pencil and doodle pad or the chalk and blackboard."

Lick pointed out the need for reference works distributed via cheap, mass-produced "published memory" (think CD-ROM); data storage that could access items by content, and not just by names or keywords (still difficult); and languages that would allow you to instruct the computer by giving it goals, instead of step-by-step procedures (even more difficult.) He also revealed his mixed feelings about artificial intelligence, then in its infancy. He saw it as being potentially very useful--but knew far too much about the brain and its complexities to believe that computers would soon be surpassing humans.

Although Licklider's ideas were little more than visions in the late 1950s, technology was beginning to catch up. In the spring of 1960, a struggling young company called Digital Equipment Corp. introduced its first computer, the PDP-1. It was a real-time, interactive machine, and it came with a built-in display screen. It was the perfect machine for Lick to try to implement the research agenda laid out in "Symbiosis." He and his team bought the display model off the exhibit floor for \$120,000 (enough to make the BBN higher-ups blanch) and plunged in. They programmed their PDP-1 for some of the first experiments with educational software, including a language vocabulary drill written by Lick himself. They experimented with online search and data retrieval. They even worked on time-sharing--although the PDP-1, whose horsepower was roughly that of the original Radio Shack TRS-80, didn't have much to share.

Building the ARPA Community

Lick would have happily continued this way indefinitely, had he not received a call in 1962 from the Department of Defense's Advanced Research Projects Agency (ARPA). The Pentagon had formed ARPA five years earlier in the aftermath of Sputnik as a fast-response research agency, charged with making sure the United States was never again caught flat-footed. Now, ARPA wanted to set up a small research program in "command and control": the ancient art of making timely decisions and getting those decisions implemented by your forces in the field. This was a critical matter in the nuclear age, and was

obviously going to involve computers. And once ARPA director Jack Ruina heard Lick expound upon his vision of interactive, symbiotic computing, he knew he had found the right person to lead the effort.

Lick didn't really want to leave BBN. But how could he say no? He would have \$10 million a year to give away pretty much as he saw fit--no peer review, no second guessing from higher-ups. The ARPA style was to hire good people, then trust them to do their jobs. There would be no "cloak and dagger" stuff, as Lick called it; the research he funded would be completely unclassified. So long as he was advancing command and control, broadly defined, he could choose which projects to fund. In effect, Lick was being offered an opportunity to spend big money in pursuit of his vision of human-computer symbiosis.

He hit the ground running in October 1962. His strategy was to seek out the scattered groups of researchers around the country who already shared his dream, and nurture their work with ARPA funding. Within months, the "ARPA community," as it came to be known, was taking shape. First among equals was Project MAC at MIT, founded with Lick's encouragement as a large-scale experiment in timesharing and as a prototype for the computer utility of the future. MAC--the name stood for both "Multi-Access Computer" and "Machine-Aided Cognition"--would also incorporate Marvin Minsky's Artificial Intelligence (AI) Laboratory. Other major sites included Stanford, where Lick was funding a new AI group under time-sharing inventor John McCarthy; Berkeley, where he had commissioned another demonstration of time-sharing; Rand Corp., where he was supporting development of a "tablet" for freehand communication with a computer; and Carnegie Tech (now Carnegie Mellon University), where he was funding Allen Newell, Herbert Simon, and Alan Perlis to create a "center of excellence" for computer science. Lick had also taken a chance on a softspoken visionary he barely knew--Douglas Engelbart of SRI International--whose ideas on augmenting the human intellect with computers closely resembled his own and who had been thoroughly ignored by his colleagues. With funding from Lick, and eventually from NASA as well, Engelbart would go on to develop the mouse, hypertext, onscreen windows and many other features of modern software.

The trick, Lick knew, was to create a community in which widely dispersed researchers could build on one another's work instead of generating incompatible machines, languages and software. Lick broached this issue in an April 1963 memo to "Members and Affiliates of the Intergalactic Computer Network"--meaning his principal investigators. The solution was to make it extremely easy for people to work together by linking all of ARPA's time-sharing computers into a national system. He wrote:

If such a network as I envisage nebulously could be brought into operation, we would have at least four large computers, perhaps six or eight small computers, and a great assortment of disc files and magnetic tape units--not to mention the remote consoles and teletype stations--all churning away.

From the modern perspective, this little paragraph is electrifying--it is perhaps

the first written description of what we now call the Internet. But Lick didn't stop there. Clearly enamored by the idea, he spent most of the rest of the memo sketching out how people might use such a system. He described a network in which software could float free of individual machines. Programs and data would live not on an individual computer but on the Net--the essential notion of the Java applets now found all over the Web.

Lick couldn't do much about his idea immediately, since networking technology wasn't even close to being ready. So instead he talked (and talked, and talked), trying to sell the notion to anyone who would listen, confident that he was planting a seed that would grow.

Meanwhile, he had a program to run. Lick presided over his far-flung community in much the same way he'd run his research groups at MIT and BBN--with a mix of parental concern, irrepressible enthusiasm and visionary fervor.

True, his nonstop stream of ideas and suggestions could be exasperating; the recipients sometimes felt as though their sponsor's imagination was voyaging among the stars while they were still struggling to build a biplane. But Lick was more interested in being a mentor than a micromanager. As long as people made reasonable progress in the right direction, he would let them find their own way.

At ARPA, program managers traditionally moved on after a year or two to give someone else a chance, and Lick was no exception. But in September 1964, when he left ARPA for the IBM research laboratory, he took care to find a successor who shared his vision. His choice was Ivan Sutherland, a 26-year-old computer graphics genius from MIT's Lincoln Lab whose doctoral project, Sketchpad, was the ancestor of today's computer-aided design software.

Lick's influence would continue to be felt at ARPA for more than a decade. Sutherland's successor in 1966 would be Robert W. Taylor, who shared with Lick a background in psychology and who was probably Lick's most enthusiastic convert to the symbiosis vision. It was Taylor who would inaugurate the actual development of Lick's proposed computer network, which began operation in 1969 as the ARPAnet and ultimately evolved into the Internet. And it was Taylor who went on to head the computer group at Xerox's Palo Alto Research Center (PARC)--where, during the 1970s, researchers turned Lick's notion of symbiosis into a working system. PARC's radical developments included the first graphics-based personal computer, the Ethernet local-area network and the laser printer. When Taylor left ARPA in 1969, he handed the reins to ARPAnet architect Larry Roberts, another computer graphics maven who had become intrigued with networking after a late-night bull session with Lick.

Lick always insisted, with characteristic modesty, that he had accomplished very little in his two years at ARPA. In a narrow sense, he had a point. Essentially nothing was happening in September 1964 that had not already been underway in one form or another when he arrived at the agency.

And yet, Licklider's impact was profound. When ARPA presented him with a never-to-be-repeated opportunity to turn his vision into reality, he had the guts to go for it. Once he had the Pentagon's money in hand, Lick had the taste and judgment to recognize good ideas and good people. He had the competence and integrity required to win their respect. And he had the overarching concept--human-computer symbiosis--that let each of his disciples feel like a part of something much larger than themselves. Most important, by funneling so much money into research at universities, where most of it actually went to support students, he guaranteed that his vision would live on after him.

"It seems to me that Licklider and ARPA were mainly about winning the hearts and minds of a generation of young scientists, and convincing them that computer science was an exciting thing to do," says James Morris, chair of the Carnegie Mellon computer science department. "In the aftermath of Sputnik, the glamour field was physics, not computing. Lots of very smart people made a career decision to go into a field that didn't exist yet, simply because ARPA was pouring money into it."

Forgotten Revolutionary

As eloquent testimony to the success of Lick's strategy, consider that during the late 1960s and early 1970s, at the height of the Vietnam debacle, when many people viewed governments and institutions of all kinds as instruments of oppression and punch-card belching mainframes as a potent symbol of tyranny, a rising generation of students was beginning to think of computers as liberating. This was the generation that would gather at Xerox PARC. And this was the generation--together with the students they taught--who would engineer the personal computer revolution of the 1980s and turn the ARPAnet into the Internet and then create the World Wide Web. The list is a long one, including Alan Kay of the University of Utah, who in 1968 came up with the notion of a notebook computer called the "Dynabook"; Dan Bricklin of Project MAC, who invented VisiCalc, the first electronic spreadsheet; Bob Metcalfe of Project MAC, inventor of Ethernet and founder of 3Com; John Warnock of Utah and PARC, founder of Adobe Systems; and Bill Joy of Berkeley, co-founder of Sun Microsystems. Even now, people who never heard of J.C.R. Licklider fervently believe in what he dreamed of, because his ideas are in the very air they breathe.

Why, then, have most people never heard of him?

One reason is that Lick wasn't the kind of person modern-day computer journalists like to write about. He didn't start a company, or create best-selling software. He wasn't a mediagenic guru. He seemed to be just another government bureaucrat from back in technology prehistory. Moreover, Lick wasn't even very successful as a bureaucrat, at least not after he left ARPA. Two exasperating years at IBM sent him back to MIT in 1966; the computer giant's corporate culture was grounded so firmly in mainframes and batch-processing that Lick saw no chance to convert the company to

human-machine symbiosis in his lifetime. His rocky stint as director of Project MAC, from 1968 to 1971, strained many an old friendship there; Lick's loathing for paperwork made him a disastrous manager. A second tour at ARPA, from 1974 to 1975, was even worse: In the post-Vietnam environment, the free-wheeling computer research program he had founded was mired in demands for immediate military relevance. A colleague who watched him there likened it to a Christian being fed to the lions.

And Lick wasn't a young Christian anymore. By the time microcomputers hit big in the early 1980s, he was pushing 70. Just as his ideas of personal computing and networking were coming to fruition, he was losing the vigor to contribute significantly to the cause. His hands had a noticeable tremor--a condition that would eventually be diagnosed as Parkinson's disease. His allergies had crossed the line into asthma, and he never went anywhere without an inhaler. In the end, it was the asthma that finally caught up with him: An attack left his brain without oxygen too long, and Lick died without regaining consciousness in June of 1990.

But mainly, we haven't heard of Lick because he refused to toot his own horn. He seems to have been one of those rare beings who genuinely didn't care who got the credit, so long as the goal was accomplished. Psychologist George Miller, who worked with Licklider at Harvard during World War II, remembers him as "extremely intelligent, intensely creative, and hopelessly generous" with his ideas.

Forty years later, Stuart Malone discovered much the same quality. In the early 1980s, Lick had taken Malone and a number of other undergraduates under his wing. He made sure they had a space of their own, a common area they painted green and called "The Meadow." He got them exclusive use of one of the lab's VAX/750 computers, which they immediately equipped with a Unix password: lixkids. He had made them feel part of something much larger than themselves. And, of course, he had said not a word about his own past--which was why Malone was so astonished at Lick's retirement dinner in 1985. "There were hundreds of people there from MIT, from DEC, from PARC, from the Defense Department," he recalls, "all standing up and crediting Lick with giving them a chance to do their best work."

David Burmaster, who had been Lick's assistant at Project MAC, will never forget it. "I'd felt I was the only one, that somehow Lick and I had this mystical bond. Yet during that evening I saw that Lick had had this amazing relationship with--a hundred? Two hundred? I'm not sure even how to count them. And everybody he touched felt that he was their hero, and that he had been an extraordinarily important person in their life."

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